Annual Sanitary Reports
of the
Sanitary Commissioner for the Government of Bombay
for the years
1884 to 1887

00133387

BOMBAY BRANCH
OF THE
ROYAL ASIATIC SOCIETY.
TOWN HALL, BOMBAY.

Digitized with financial assistance from
Government of Maharashtra
on 13 March, 2020

ANNUAL REPORT

OF THE

ency for the Government
Bombay.

WITH

PENDICES.

133387

Bombay:
[redacted]

00133387

CONTENTS.

SECTION I.—METEOROLOGY—Nil.

SECTION II.—EUROPEAN ARMY—Nil.

SECTION III.—NATIVE ARMY—Nil.

SECTION IV.—JAILS—Nil.

SECTION V.

GENERAL POPULATION AND VITAL STATISTICS.

PARA.		PAGE.
1.	Compilation of vital statistics	1
2, 3, 4.	Change in Collectorates	2
	BIRTHS.	
5.	Number of registered births	2
6.	Birth-rate in 1884 compared with previous years from 1874 to 1883 ...	2
7.	Comparison between the number of births registered in each District and Collectorate for 1884 with the number for 1883 and the mean for 10 years	3
8.	Birth registration in Urban and Rural Districts	4, 5
9.	Birth-rate in sequence in towns	6
10.	Births by months	7
11.	Birth-rates in Cantonments	7
12.	Still-born	8
	DEATHS.	
13.	Number of deaths	8
14.	Death-rate	8
15.	Male and female death-rates	8
16.	Deaths by Districts	9
17.	Do. by Collectorates	9
18.	Death-rate by Collectorates in sequence	10
19.	Do. by sexes	10
20.	Deaths by ages	11
21.	Do. by caste or class	11
22.	Do. by causes	12
23.	Do. by months	12
24.	Number of Circles	12
	WESTERN REGISTRATION DISTRICT.	
	COLLECTORATES.	
25.	Khándesh	12, 13
26.	Násik	14, 15
27.	Thána	16, 17
28.	Bombay	18
29.	Kolába	19, 20

CENTRAL REGISTRATION DISTRICT.

Collectorates.

Para.		Page.
30.	Ahmednagar	... 21, 22
31.	Poona	... 23, 24
32.	Sholápur	... 25, 26
33.	Sátára	... 27, 28
34.	Ratnágiri	... 29, 30

SOUTHERN REGISTRATION DISTRICT.

Collectorates.

35.	Belgaum	... 31, 32
36.	Dhárwár	... 33, 34
37.	Kaládgi	... 35
38.	Kánara	... 36, 37

EASTERN GUJARÁT REGISTRATION DISTRICT.

Collectorates.

39.	Surat	... 38, 39
40.	Broach	... 40
41.	Kaira	... 41, 42
42.	Panch Maháls	... 43, 44
43.	Ahmedabad	... 45, 46

SIND REGISTRATION DISTRICT.

Collectorates.

44.	Karáchi	... 47, 48
45.	Hyderabad	... 49, 50
46.	Thar and Párkar	... 51
47.	Shikárpur	... 52, 53
48.	Upper Sind Frontier	... 54, 55
49.	Birth and death-rates compared by Collectorates	... 56
50, 51.	Do. in sequence in towns	...56—59
52.	Statistics for Cantonment Bázárs in quasi-foreign territory ...	... 59, 60

SECTION VI.

HISTORY OF CHIEF DISEASES.

Cholera.

53.	Total mortality from cholera	61
54.	Mortality for 19 years from 1866-1884	61
55.	Mortality in Sind during 10 years ending 1883	62
56.	Do. in Presidency except Sind	63
57.	Monthly mortality for 1884...	63
58.	Death-rates by Collectorates	64
59.	Details of attacks and deaths and death-rates by Collectorates and by sexes .	64
60.	Cholera in the Presidency generally	65
61.	Registration Circles affected by cholera	65
62.	Mortality in Rural Circles	66
63.	Urban mortality	66
64.	High mortality in towns	67
65.	Affected towns arranged in sequence	68
66.	Cholera in Civil Cantonments	68
67.	Villages affected by cholera	68
68.	Collectorates in which cholera first appeared in *Towns* and those in which it first invaded *Villages*	68
69.	Progress of Cholera by Collectorates	69
70.	Do. do. in Khándesh Collectorate	69
71.	Do. do. in Násik do.	69
72.	Do. do. in Thána do.	69
73.	Do. do. in City of Bombay	70

PARA. PAGE.

74. Progress of Cholera in Kolába Collectorate 71
75. Do. do. in Ahmednagar do. 71
76. Do. do. in Poona do. 72
77. Do. do. in Sholápur do. 72
78. Do. do. in Sátára do. 72
79. Do. do. in Ratnágiri do. 73
80. Do. do. in Belgaum do. 73
81. Do. do. in Dhárwár do. 73
82. Do. do. in Kaládgi do. 74
83. Do. do. in Kánara do. 74
84. Do. do. in Surat do. 75
85. Do. do. in Broach do. 75
86. Do. do. in Kaira do. 76
87. Do. do. in Panch Maháls do. 76
88. Do. do. in Ahmedabad do. 77
89. Do. do. in Karáchi do. 77
90. Do. do. in Hyderabad do. 77
91. Do. do. in Thar and Párkar do. 78
92. Do. do. in Shikárpur do. 78
93. Do. do. in Upper Sind Frontier do. 78
94. Attacks and deaths 78
95. Statement appended to Cholera Map 78
96. Cholera Map 80

SMALL-POX.

97. Small-pox mortality by sexes 81
98. Small-pox deaths since 1873 ... ... *id.*
99. Deaths by Districts and Collectorates ... ... *id.*
100. Death-rates in urban and rural population 82, 83
101. Death-rate in Towns and Cantonments compared with Collectorates ... 83, 84
102. Deaths by ages... 84
103. Monthly distribution 85
104. Diagram of Small-pox ... ... *id.*

FEVER.

105. Fever mortality by sexes 85
106. Deaths since 1873 86
107. „ by Districts and Collectorates ... ... *id.*
108. Death-rates in urban and rural population 87
109. „ in Towns and Cantonments compared with the rate of the Zilla in which they are situated 88, 89
110. Deaths by months 89
111. Diagram of Fever 90

BOWEL-COMPLAINTS.

112. Deaths from bowel-complaints by sexes 91
113. „ since 1873 ... ... *id.*
114. „ by Districts and Collectorates 91, 92
115. Death-rates in urban and rural population 92
116. „ from bowel-complaints in Towns and Cantonments compared with Collectorates ... ... 92—94
117. Deaths by months 94
118. Diagram of Bowel-complaints 94, 95

INJURIES.

119. Deaths from injuries 96
120. „ since 1873 ... ... *id.*
121. „ from injuries in 1883 and 1884 arranged by sex ... ... *id.*
122. „ from injuries by Districts and Collectorates 96, 97
123. Death-rates in urban and rural population 97, 98
124. Death-rate in Towns and Cantonments compared with the rate of the Zilla in which they are situated 98, 99
125. Snake-bites by months 99
126. „ by Collectorates 100
127. Details of injuries 100, 101
128. Diagram of Injuries 102

OTHER CAUSES.

129. Deaths from other causes by sexes 103
130. „ since 1873 ... ... *id.*

SECTION VII.

GENERAL HISTORY OF VACCINATION.

PARA.		PAGE.
131.	Strength of the Department	104
132—142.	Operations	104—106
143.	Agency	106
144.	Sex	107
145.	Race	*id.*
146.	Age	*id.*
147.	Animal Vaccination	*id.*
148—150.	Expenditure	*id.*
151.	Work of Supervising Officers	108
152.	Compulsory Vaccination Acts	*id.*

SECTION VIII.

SANITARY WORKS—MILITARY.

154.	Amount expended on Sanitary Works (Military)				1
155.	Amount spent at each Station				
156.	Sanitary Works executed during 1884 in the Bombay Cantonment ...				
157.	Do.	do.	Kolába	do.	...
158.	Do.	do.	Thána	do.	...
159.	Do.	do.	Devláli	do.	...
160.	Do.	do.	Surat	do.	...
162.	Do.	do.	Baroda	do.	...
163.	Do.	do.	Ahmedabad	do.	...
164.	Do.	do.	Rájkot	do.	...
165.	Do.	do.	Bhúj	do.	...
166.	Do.	do.	Deesa	do.	...
167.	Do.	do.	Mount Abu	do.	...
168.	Do.	do.	Nasirabad	do.	...
169.	Do.	do.	Neemuch	do.	...
170.	Do.	do.	Mehidpur	do.	...
171.	Do.	do.	Agar	do.	...
172.	Do.	do.	Indore	do.	...
173.	Do.	do.	Mhow	do.	...
174.	Do.	do.	Asirgarh	do.	...
175.	Do.	do.	Málegaon	do.	...
176.	Do.	do.	Ahmednagar	do.	...
177.	Do.	do.	Sirúr	do.	...
178.	Do.	do.	Purandhar	do.	...
179.	Do.	do.	Sholápur	do.	...
180.	Do.	do.	Poona	do.	...
181.	Do.	do.	Kirkee	do.	...
182.	Do.	do.	Khandála	do.	...
183.	Do.	do.	Sátára	do.	... id
184.	Do.	do.	Kolhápur	do.	... 117
185.	Do.	do.	Belgaum	do.	... id
186.	Do.	do.	Dhárwár	do.	... id.
187.	Do.	do.	Karáchi	do.	... id.
188.	Do.	do.	Hyderabad	do.	... id.
189.	Do.	do.	Jacobabad	do.	... id.
190—193.	Do.	do.	Aden	do.	117, 118
194.	Do.	do.	Sibi	do.	... 118
195.	Do.	do.	Sharigh	do.	... id.
Do.	Do.	do.	Gundakinduff	do.	... id.
Do.	Do.	do.	Dukki	do.	... id.
Do.	Do.	do.	Bolan Pass	do.	... id.

SECTION IX.

SANITARY WORKS—CIVIL.

197.	Annual income of the Municipalities	119
Do.	Amount expended on conservancy	*id.*

NORTHERN DIVISION.

PARA.		PAGE.
198—207.	Ahmedabad District	119—120
	Kaira do.	
	Panch Mahals do.	
	Broach do.	
	Surat do.	
	Thána do.	
	Kolába do.	

CENTRAL DIVISION.

208—216.	Ahmednagar District	121—123
	Khándesh do.	
	Násik do.	
	Poona do.	
	Sátára do.	
	Sholápur do.	

SOUTHERN DIVISION.

217—225.	Kánara District	123, 124
	Belgaum do.	
	Kaládgi do.	
	Ratnágiri do.	
	Dhárwár do.	

SIND DIVISION.

226—234.	Karáchi District...	124—126
	Hyderabad do.	
	Shikárpur do.	
	Thar and Párkar do.	
	Upper Sind Frontier do.	

LOCAL FUND CIRCLES.

235.	Northern Division	126
236.	Central do.	*id*
237.	Southern do.	*id.*
238.	Sind do.	*id.*

SECTION X.

PERSONAL PROCEEDINGS AND GENERAL REMARKS.

239.	Personal proceedings	127
240.	Appointment of a full-time Heath Officer of the Port	*id.*
241.	Procedure regarding medical inspection of vessels and Bills of Health	...127,128
242.	Number of square-rigged vessels and steamers inspected ...	...128,129
243.	Incoming vessels	129
244.	Country craft	130
245.	Cholera among harbour population	...130,131
246.	Most of these cases occurred at the Carnac and Masjid Bandars ...	131
247.	Insanitary condition of foreshore	*id.*
248.	Sanitary condition of ships infinitely more important than medical inspection of crew and passengers	*id.*
249.	Dr. Southwood Smith's remarks	...131,132
250.	Probability of disease breaking out on board of a dirty ship	132
251.	Opinion of the Sanitary Commissioner with the Government of India ...	*id.*
252.	Present law does not provide for sanitary examination of ships	...132,133
253.	Appointment of Consulting Sanitary Engineer for the Presidency ...	133
254.	Sanitary Engineering, a speciality	*id.*
255.	Appointment of Colonel Ducat, R.E.	*id.*
256.	Great assistance afforded by Colonel Ducat	*id.*
257.	Need for sanitary engineering work at Surat, Ahmednagar, Násik, Pandharpur	134
258.	Cholera hospital for natives in the Fort	*id.*
259.	Experience of the past	*id.*
260.	The opinion of Government	*id.*
261.	Groundless apprehensions regarding the contagiousness of cholera ...	*id.*

Para.		Page.
262.	Site of proposed hospital	134
263.	Dr. Southwood Smith on contagion	134,135
264.	Surgeon-General Beatty's theory not supported by facts	135
265.	Surgeon-General Cunningham's new work on cholera	*id.*
266.	His statements	*id.*
267.	Former evidence regarding the non-contagiousness of cholera...	135,136
268.	Facts in India regarding cholera	136
269.	Opinion of Army Sanitary Commission...	*id.*
270.	Dr. Hutcheson's evidence	*id.*
271.	Care of cholera patients not attended with risk	*id.*
272.	Immunity among sweepers and dhobis	136
273.	Among the labourers of the Public Health Department	*id.*
274.	Cholera certainly not contagious	*id.*
275.	Theory of spread by human intercourse not borne out by facts in Bengal ...	137
276.	Or in Bombay	*id.*
277.	Places not persons	*id.*
278.	Importation theory leads to imposition of quarantine	*id.*
279.	Dr. Cunningham's opinion regarding the cholera-producing cause ...	*id.*
280.	Epidemic atmosphere	138
281.	Seasonal prevalence	*id.*
282.	English cholera Commissioners	*id.*
283.	Water theory	*id.*
284.	Pure water-supply, first line of defence	*id.*
285.	Cholera, a fever	*id.*
285A.	Cholera and malaria	138,139
286.	Dr. Bryden's views	139
287.	Organic matter in soil	*id.*
288.	Predisposing causes	*id.*
289.	Filth, chief factor in producing cholera	*id.*
290, 291.	Sanitary improvements universally recognised as the only sure preventive, and early removal from affected locality recommended ...	139,140
292.	The diminished death-rate among prisoners and British troops testifies to the value of sanitary improvements	140
293.	The only way to prevent epidemics	*id.*
294.	Simple cleanliness required	*id.*
295.	Premonitory diarrhœa in cholera	*id.*
296.	Greater facilities for villagers to obtain medicine	141
297.	Present orders of Government	*id.*
298.	Medicine to be of use should be given immediately	*id.*
299.	The use of dilute sulphuric acid recommended	*id.*
300.	Dr. Hutcheson's remarks on the value of dilute sulphuric acid... ...	*id.*
301.	Factory Commission Report	141,142
302.	Tánsa Reservoir	142
303.	Leper Asylum	*id.*
304.	Work of Deputy Sanitary Commissioners	*id.*
305.	Surgeon-Major MacRury	*id.*
306.	Surgeon Channer	*id.*
307.	Surgeons Clarkson and Peacocke	143
308.	Dr. Colah	*id.*
309.	Surgeon Parker	143
310.	Surgeon Tully	*id.*
311.	Surgeon MacCartie	*id.*
312.	Assistant Surgeons Ananta Chandroba and Sakhárám Arjun	*id.*
313.	Number of towns and villages inspected by Civil Surgeons ...	143,144

APPENDIX I.

GENERAL HISTORY OF VACCINATION.

1.	Changes amongst the Supervising Officers	*I*
2.	Strength of the Department...	*id.*
3.	Work amongst the Civil and Military population	2
4.	The number of the infants successfully vaccinated in each Collectorate ...	3
5.	Primary vaccinations	4
	Results in primary vaccinations	*id.*
6.	Re-vaccinations	5
	Results in re-vaccinations	*id.*
7.	Total operations	*id.*
	Results in total operations	*id.*

PARA.		PAGE.
8.	Primary vaccination, re-vaccinations, and total operations by Districts and Circles	5
9.	Primary vaccinations. Increase and decrease by Districts and Circles ...	6
10.	Re-vaccinations. Increase and decrease by Districts and Circles ...	*id.*
11.	Total Operations. Do. do.	*id.*
12.	Particulars of vaccine operations by caste, age, sex and result, with their percentages according to Districts and Circles	10
13.	Caste	*id.*
14.	Age	11
15.	Infants successfully vaccinated as compared with those available for vaccination by Districts and Circles at the rate of 31 per *mille* of population ...	*id*
16.	Sex	12
17.	Results	*id.*
18.	Percentages of success reviewed by Districts and Circles	13
19.	Rate per mille of population protected by primary vaccinations by Districts and Circles	*id,*
20.	Vaccinations by Establishments	14
21.	Results in vaccine operations by Establishments	*id.*
22.	Percentages of success reviewed by Establishments	15
23.	Work of Establishments by Districts and Circles	*id.*
24.	Work of Government vaccinators	*id.*
25.	Work of Cantonment vaccinators	*id.*
26.	Work of Municipal vaccinators	16
	Necessity for Special vaccinators in towns having a population of 10,000 ...	*id.*
27.	Work of Local Fund vaccinators	17
28.	Work of Native State vaccinators	*id.*
	States that require additional vaccinators	18
29.	Work of Dispensary Officers	*id.*
30.	Work performed in the Army generally...	19
31.	European Troops	*id.*
32.	Native Troops	20
33.	Average number of operations per each kind of Establishment	*id.*
34.	Average number of operations per vaccinator by Districts and Circles ...	*id.*
35.	English lymph	21
36.	Quality of the lymph in use	*id.*
37.	Lymph supplied	*id.*
38.	Animal vaccination	*id.*
39.	Expenditure	23
40.	Cost of each successful case including all charges	*id.*
41.	Cost of each successful case, after deducting the pay of the Supervising Officers by Districts and Circles	*id.*
42.	Work of Deputy Sanitary Commissioners and Superintendents of Vaccination.	24
43.	Inspections from Vaccination Registers	*id.*
	Truthfulness of Vaccination Registers	25
	Classification of successful cases	*id.*
	Inspections without Vaccination Registers	*id.*
44.	Remarks on the work of the Supervising Officers	*id.*
45	Work of Inspectors and Assistant Superintendents...	*id.*
	Their conduct	26
46.	Total inspections	*id.*
47.	Conduct of vaccinators	*id.*
48.	Clerks	*id.*
49.	Inoculation	*id.*
50.	Ill-effects by vaccination	*id.*
51.	Aid from Civil, Revenue, and Political Officers	27
52.	Small-pox by Collectorates and Registration Districts	*id.*
53.	Small-pox occurring after vaccination	28
54.	Progress in the Western Registration District	29
55.	Do. Khándesh Collectorate	*id.*
56.	Do. Násik do.	*id.*
57.	Do. Thána do.	*id.*
58.	Do. Kolába do.	30
59.	Do. Native States in the Western Registration District ...	*id.*
60.	Do. Presidency Circle	*id.*
61.	Do. Central Registration District	*id.*
62.	Do. Ahmednagar do.	31
63.	Do. Poona do.	*id.*
64.	Do. Sholápur do.	*id.*
65.	Do. Sátára Collectorate	*id.*
66.	Do. Ratnágiri do.	*id.*
67.	Do. Native States in the Central Registration District ...	*id.*

PARA.			PAGE.
68.	Progress in the Southern Registration District		32
69.	Do.	Belgaum Collectorate	id.
70.	Do.	Dhárwár do.	id.
71.	Do.	Kaládgi do.	id.
72.	Do.	Kánara do.	33
73.	Do.	Native States in the Southern Registration District	id.
74.	Do.	Eastern Gujarát Registration District	id.
75.	Do.	Surat Collectorate	id.
76.	Do.	Broach do.	34
77.	Do.	Kaira do.	id.
78.	Do.	Panch Mahâls	id.
79.	Do.	Ahmedabad Collectorate	id.
80.	Do.	Native States in the Eastern Gujarát Registration District	id.
81.	Do.	Western Gujarát Circle	35
82.	Do.	Province of Káthiáwár	id.
83.	Do.	Pálanpur States	id.
84.	Do.	Sind Registration District	id.
85.	Do.	Karáchi Collectorate	id.
86.	Do.	Hyderabad do.	36
87.	Do.	Thar and Párkar	id.
88.	Do.	Shikárpur Collectorate	id.
89.	Do.	Upper Sind Frontier	id.
90.	Do.	Khairpur State	id.
91.	Do.	Baroda Circle	id.
92.	Do.	Cutch do.	37
93.	Do.	Aden	id.
94.	Do.	Muskat and Bushire	id.
95.	Tour of Deputy Sanitary Commissioners and Superintendents of Vaccination.		id.
96.	The Bombay Vaccination Act, No. I. of 1877		38
97.	Karáchi Vaccination Act		39
98.	Suggestion for the more effectual spread of vaccination		id.

APPENDIX II.

GENERAL POPULATION AND VITAL STATISTICS.

Births registered in the Districts during 1884		2
Deaths registered in do. do.		id.
Do. in do. during each month of the year		3
Do. in do. according to age		id.
Do. in do. according to classes		4
Do. from different causes in the Districts and Towns during 1884		4, 6
Do. from cholera in the Districts during each month of the year		6
Do. from small-pox in do. do.		7
Do. from fever in do. do.		id.
Do. from bowel-complaints in do. do.		8

VACCINATION.

Particulars of vaccination during 1884-85	9, 19
Cost of the Department during the year	20, 21
Dispensary vaccination during the year	22, 27
Comparative Statement showing the number of persons primarily vaccinated and the number of persons successfully vaccinated in each year from 1875-76 to 1884-85	28

ANNUAL SANITARY REPORT FOR 1884.

SECTION I.—METEOROLOGY.—No remarks.

SECTION II.—EUROPEAN ARMY.—No remarks.

SECTION III.—NATIVE ARMY.—No remarks.

SECTION IV.—JAILS.—No remarks.

These sections are omitted from this report; (*vide* Government of India Resolution No. 118, dated 27th June 1878.)

SECTION V.

GENERAL POPULATION AND VITAL STATISTICS.

Compilation of Vital Statistics.

On the 1st July 1884 the compilation of the Vital Statistics of the Presidency was for the first time entrusted solely to the Deputy Sanitary Commissioners. Up to this date the village returns had been compiled tálukvár by the Mámlatdárs of each Zilla, but this system had been found to be inefficient, and Government was pleased to sanction an establishment of compilers for the office of each Deputy Sanitary Commissioner who is thus brought each month into direct communication with every village in his district. Advantage was taken of this opportunity to re-arrange the Deccan and Konkan Registration Districts and to alter their designation, so that for the future the Northern Deccan, Southern Deccan and Konkan Registration Districts will disappear from the Annual Return. The principle observed in fixing the areas of the new districts was to make them co-terminous with Collectorates in which the same language is spoken.

Change in Collectorates.

2. The Registration Districts as now constituted comprise the following Collectorates :—

Districts.	Collectorates.	Vernacular Language of District.
Western Registration District—	Khándesh ...	Maráthi.
	Násik ...	
	Thána...	
	Kolába ...	
Central do. do.	Ahmednagar ...	Maráthi.
	Poona...	
	Sholápur ...	
	Sátára...	
	Ratnágiri ...	
Southern do. do.	Belgaum ...	Kánarese.
	Dhárwár ...	
	Kaládgi ...	
	Kánara ...	
Eastern Gujarát do. do.	Surat	Gujaráti.
	Broach ...	
	Kaira	
	Panch Maháls ...	
	Ahmedabad ...	
Sind do. do.	Karáchi ...	Sindi.
	Hyderabad ...	
	Thar and Párkar ...	
	Shikárpur ...	
	Upper Sind Frontier	

3. The new arrangement has been found to work admirably as the statistics are now received from the villages with much greater punctuality than formerly. Government has been pleased to impress on Collectors the necessity for the village officers submitting their returns to the Deputy Sanitary Commissioner by a fixed date, and the Kulkarnis and Talátis are liable to a fine if any complaint is made regarding the late submission of the returns when due.

4. For convenience of comparison the statistics for the ten preceding years have been compiled in this report for each district as at present constituted.

BIRTHS.

Number of registered births.

5. In the Presidency of Bombay, including Sind, during the year 1884 the births of 278,986 males and 255,737 females, or a total of 534,723 children, were recorded against 261,966 boys and 239,835 girls, or a total of 501,801 children in 1883. The recorded births for 1884 are thus 32,922 in excess of those for the previous year, whilst they exceed the mean of the preceding 10 years ending 1883 by 166,165.

Birth-rate in 1884 compared with previous years from 1874 to 1883.

6. The following table shows the number of births registered in each year from 1874 to 1884, their ratios per 1,000 of population and the proportion of males to females:—

Years.	Number of Births registered.			Ratio per 1000 of Population.			In every 100 Births there were.		For every 100 Male Births the Females were.
	Males.	Females.	Children.	Males.	Females.	Children	Males.	Females.	
1874	174,966	157,842	332,808	10·81	9·75	20·56	52·57	47·43	90·2
1875	178,892	161,937	340,829	11·05	10·01	21·06	52·49	47·51	90·5
1876	181,872	163,612	345,484	11·24	10·11	21·35	52·64	47·36	89·9
1877	164,262	147,399	311,661	10·15	9·11	19·26	52·75	47·25	89·7
1878	128,848	114,405	243,253	7·96	7·07	15·03	52·97	47·03	88·7
1879	151,460	136,410	287,870	9·33	8·41	17·74	52·61	47·39	90·0
1880	195,285	175,588	370,873	12·03	10·82	22·85	52·66	47·34	89·9
1881	239,912	219,745	459,657	14·58	13·35	27·93	52·19	47·81	91·5
1882	255,927	235,419	491,346	15·55	14·31	29·86	52·09	47·91	91·9
1883	261,966	239,835	501,801	15·92	14·58	30·50	52·20	47·80	91·5
Mean for 10 years ...	193,339	175,219	368,558	11·86	10·75	22·61	52·46	47·54	90·6
1884 ...	278,986	255,737	534,723	16·96	15·54	32·50	52·17	47·83	91·6

It is satisfactory to notice the progressive improvement that, except in the three years of famine, has taken place in the registration of births.

Comparison between the number of births registered in each District and Collectorate for 1884 with the number for 1883 and the mean for 10 years.

7. The next table shows the number of births registered in 1884 in each District and Collectorate of the Presidency contrasted with those for 1883 and the mean for 10 years:—

Districts.	Number.	Collectorates.	Population according to Census of 1881.	Mean for 10 years, 1874-83.		1883.		1884.	
				Number of Births.	Ratio per 1000 of Population.	Number of Births.	Ratio per 1000 of Population.	Number of Births.	Ratio per 1000 of Population.
Western Registration District.	1	Khándesh	1,237,231	28,705	26·31	39,876	32·23	45,170	36·51
	2	Násik	781,206	20,913	27·94	24,214	30·99	26,263	33·62
	3	Thána	807,367	18,553	24·04	23,552	29·17	24,644	30·52
	4	City of Bombay	773,196	14,473	21·19	14,932	19·31	14,377	18·59
	5	Kolába	482,830	9,482	20·90	13,343	27·63	13,326	27·60
Central Registration District.	6	Ahmednagar	751,228	22,230	28·98	28,571	38·03	30,536	40·65
	7	Poona	900,621	19,300	21·32	25,705	28·54	30,741	34·13
	8	Sholápur	582,487	13,565	20·03	20,634	35·42	23,223	39·87
	9	Sátára	1,062,350	31,046	29·25	40,737	38·35	45,484	42·81
	10	Ratnágiri	997,090	16,032	15·83	19,976	20·03	20,599	20·66
Southern Registration District.	11	Belgaum	864,014	25,885	28·25	35,078	40·60	35,139	40·67
	12	Dhárwár	882,907	26,978	28·20	38,927	44·09	38,342	43·43
	13	Kaládgi	638,493	14,995	19·66	22,436	35·14	24,847	38·91
	14	Kánara	421,840	11,789	29·08	13,803	32·72	12,327	29·22
Eastern Gujarát Registration District.	15	Surat	614,198	16,697	27·41	21,610	35·18	21,455	34·93
	16	Broach	326,930	7,103	20·69	10,908	33·36	11,454	35·03
	17	Kaira	804,800	21,321	27·01	28,998	36·03	30,225	37·56
	18	Punch Mahále	255,479	5,526	22·54	6,629	25·95	8,926	34·94
	19	Ahmedabad	856,324	19,146	22·86	26,917	31·43	28,844	33·68
Sind Registration District.	20	Karáchi	478,688	5,756	13·08	9,005	18·81	10,637	22·22
	21	Hyderabad	754,624	6,566	8·97	12,010	15·92	12,757	16·91
	22	Thar and Párkar	203,344	3,227	17·21	5,878	28·91	5,014	24·66
	23	Shikárpur	852,986	8,312	10·40	15,865	18·60	17,905	20·99
	24	Upper Sind Frontier	124,181	958	9·56	2,197	17·69	2,488	20·03

ABSTRACT.

Western Registration District	4,081,830	92,126	24·58	115,917	28·40	123,780	30·32
Central do. do.	4,293,776	102,173	23·10	135,623	31·59	150,583	35·07
Southern do. do.	2,807,254	79,647	26·19	110,244	39·27	110,655	39·42
Eastern Gujarát do. do.	2,857,731	69,793	24·71	95,062	33·26	100,904	35·31
Sind do. do.	2,413,823	24,819	10·99	44,955	18·62	48,801	20·22
Presidency ...	16,454,414	368,558	22·61	501,801	30·50	534,723	32·50

It will be seen from the abstract of the above table that the number of births in 1884 is higher in each of the districts than that recorded in the previous year.

The total increase for the Presidency was 9·89 per 1,000 of population above the mean of the preceding 10 years and the number of recorded births in 1884 is higher than in 1883 in the following 18 Collectorates, *viz* :—

Khándesh.	Kaládgi.
Násik.	Broach.
Thána.	Kaira.
Ahmednagar.	Panch Mahále.
Poona.	Ahmedabad.
Sholápur.	Karáchi.
Sátára.	Hyderabad.
Ratnágiri.	Shikárpur.
Belgaum.	Upper Sind Frontier.

The Collectorates in which there was a falling off as compared with 1883 are as follows :—

Collectorates.	1883.	1884.
City of Bombay	14,932	14,377
Kolába	13,343	13,326
Dhárwár	38,927	38,342
Kánara	13,803	12,327
Surat	21,610	21,455
Thar and Párkar	5,878	5,014

It is most disappointing to have to bring again prominently to the notice of Government the extremely defective state of the registration of births in the City of Bombay which, as will be seen from the following statement, has steadily decreased year by year.

In 1880 the births amounted to		16,997 or 26·38 per 1,000 of population.	
„ 1881	do.	16,381 or 21·19	do.
„ 1882	do.	15,094 or 19·52	do.
„ 1883	do.	14,932 or 19·31	do.
„ 1884	do.	14,377 or 18·59	do.

Bombay instead of setting an example as the leading municipality, occupies, as will be seen further on, a very low place in the list of towns as regards the registration of births, and it is evident that very many births escape registration. I trust that Government will be pleased to invite the especial attention of the Municipal Commissioner to this fact and urge him to take measures so as to secure a much more correct registration.

Birth registration in the urban and rural districts.

8. The birth-rate per 1,000 of population in the urban and rural population in each Collectorate of the Presidency during the year 1883 and 1884 is given in the following table :—

Collectorates.	Urban and Rural.	Population.	1883.	1884.
Khándesh	Urban... ...	49,465	16·29	16·35
	Rural	1,187,766	32·89	37·35
Násik	Urban... ...	48,535	29·94	22·68
	Rural	732,671	31·07	34·34
Thána	Urban... ...	27,366	11·69	14·73
	Rural	780,001	29·78	31·08
City of Bombay	Urban... ...	773,196	19·31	18·59
	Rural	.....	...	...
Kolába	Urban... ...	23,531	15·64	20·19
	Rural	459,299	28·25	27·98
Ahmednagar	Urban... ...	46,288	30·25	32·20
	Rural	704,940	35·50	41·11
Poona	Urban... ...	147,376	17·70	19·03
	Rural	753,245	30·66	37·09
Sholápur	Urban... ...	92,926	30·45	25·82
	Rural	489,561	36·34	42·54
Sátára	Urban... ...	51,482	24·03	30·28
	Rural	1,010,868	39·08	43·45

Collectorates.	Urban and Rural.	Population.	1883.	1884.
Ratnágiri	Urban... ...	21,563	26·90	27·78
	Rural	975,527	19·88	20·50
Belgaum	Urban... ...	54,190	22·62	29·23
	Rural	809,824	41·80	41·43
Dhárwár	Urban... ...	91,071	40·40	37·32
	Rural	791,836	44·51	44·13
Kaládgi	Urban... ...	7,024	27·76	22·35
	Rural	631,469	35·22	39·10
Kánara	Urban... ...	24,390	34·19	33·33
	Rural	397,450	32·63	28·97
Surat	Urban... ...	123,073	31·05	33·43
	Rural	491,125	36·22	35·31
Broach	Urban... ...	48,760	25·94	33·55
	Rural	278,170	34·67	35·29
Kaira	Urban... ...	67,614	28·22	30·13
	Rural	737,186	36·75	38·24
Panch Maháls	Urban... ...	25,736	15·39	20·09
	Rural	229,743	27·13	36·60
Ahmedabad	Urban... ...	171,390	39·82	41·51
	Rural	684,934	29·34	31·72
Karáchi	Urban... ...	68,332	47·90	46·64
	Rural	410,356	13·97	18·15
Hyderabad	Urban... ...	45,195	23·59	24·56
	Rural	709,429	15·43	16·42
Thar and Párkar	Urban... ...	2,828	15·91	21·22
	Rural	200,516	29·09	24·71
Shikárpur	Urban... ...	83,073	18·84	20·96
	Rural	769,913	18·57	20·99
Upper Sind Frontier ...	Urban... ...	11,352	13·13	18·50
	Rural	112,829	18·15	20·19
Presidency ...	Urban... ...	2,105,756	25·07	25·53
	Rural	14,348,658	31·29	33·52

This table shows that in 1884 the recorded birth-rates among the urban and rural populations of the Presidency were respectively 25·53 and 33·52 against 25·07 and 31·29 in 1883. It also shows that the birth-rates recorded among the rural population of each Collectorate except Ratnágiri, Kánara, Ahmedabad, Karáchi and Hyderabad were higher than the birth-rates registered in the urban circles. The same fact regarding the above Collectorates was also observed in 1883.

In the following Collectorates a much higher birth-rate was registered in the rural than in the urban circles :—

Collectorates.	Rural.	Urban.
Khándesh	37·35	16·35
Thána	31·08	14·73
Poona	37·09	19·03
Sholápur	42·54	25·82
Sátára	43·45	30·28
Kaládgi	39 10	22·35
Panch Maháls	36·60	20·09

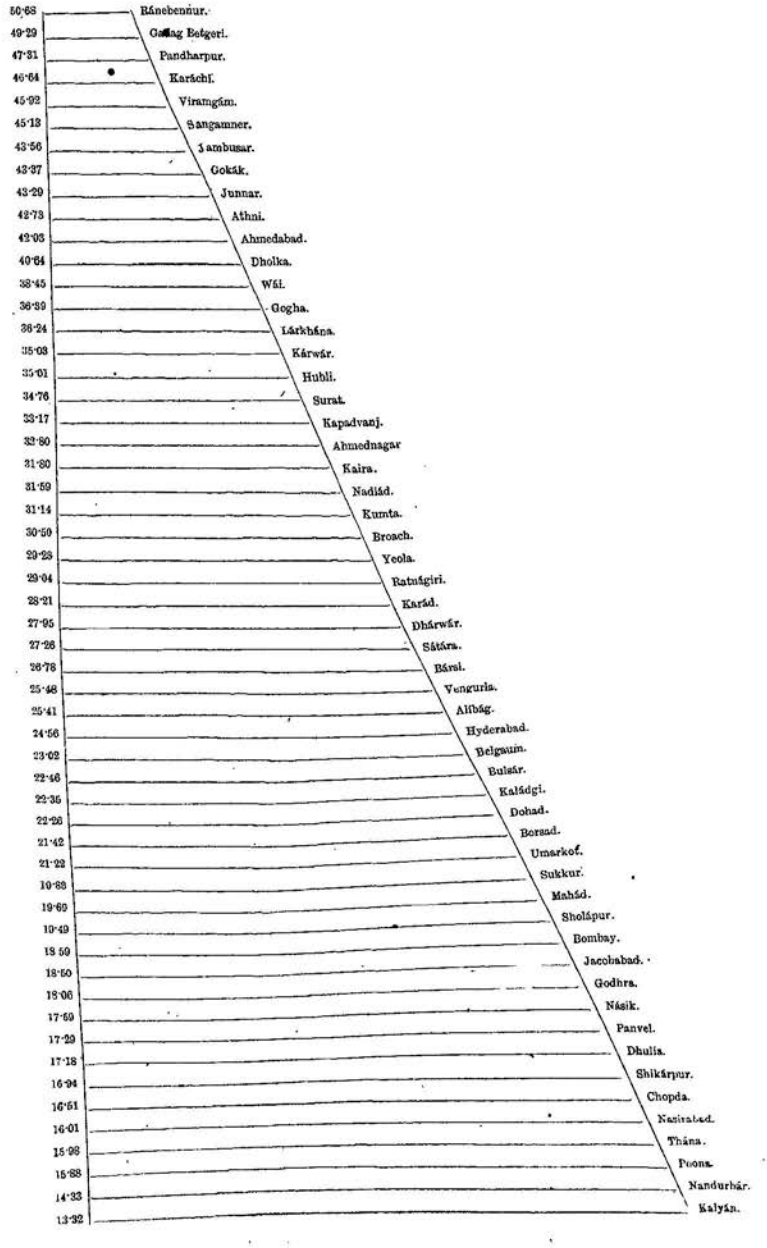
whilst in the undermentioned 5 districts the reverse is the case; and the birth-rates in the rural circles are lower than in the urban :—

Collectorates.	Rural.	Urban.
Ratnágiri...	20·50	27·78
Kánara	28·97	33·33
Ahmedabad	31·72	41·51
Karáchi	18·15	46·64
Hyderabad	16·42	24·56

Birth-rate in sequence in towns.

9. The following table shows the recorded birth-rate in each town in the Presidency arranged in sequence of the highest birth-rate per 1,000 of population.

Recorded Birth-rate in Towns per 1,000 of Population.



It will be seen that out of the 55 towns in the Presidency only 12 have a birth-rate exceeding 40 per 1,000 which may be taken as the lowest rate which can be accepted as even approximately correct, although as I shall presently show there are grounds for believing that the birth-rate is in reality higher than this. It seems as if this important subject was entirely neglected in some of our largest Municipalities and especially at places which are the head-quarter stations of the Collectorates. This is inexcusable, and it is lamentable to find that for example in the City of Poona a birth-rate of only 15·88 is recorded. I would earnestly hope that Government may be pleased to invite the especial attention of the authorities in each town to the very defective character of the registration of births and to impress on them the absolute necessity of much greater attention being paid to this most important subject. The birth-rates in each táluka of each Collectorate will be considered further on in the report. The undermentioned Municipalities deserve credit for the attention they have paid to the registration of births :—

Collectorates.	Municipal Towns.	Birth-rate.
Ahmednagar	Sangamner	45·13
Poona	Júnnar	43·29
Sholápur	Pandharpur	47·31
Belgaum	Gokák	43·37
	Athni	42·73
Dhárwár	Gadag Beltegeri	49·29
	Ránebennur	50·68
Broach	Jambusar	43·56
Ahmedabad... ...	Ahmedabad	42·03
	Viramgám	45·92
	Dholka	40·64
Karáchi	Karáchi	46·64

10. The following table shows the monthly distribution of births in 1884 as compared with 1883 and with the monthly mean of the previous 10 years :—

Births by months.

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Mean of 10 years 1874-83 .	27,892	25,266	28,754	28,832	30,309	31,545	33,851	33,383	32,923	33,070	32,110	30,623	368,558
1883	39,388	38,098	41,557	39,025	42,295	45,504	44,403	45,072	43,915	41,821	40,201	39,622	501,801
1884	37,582	36,959	41,965	41,761	44,643	49,175	48,123	48,397	45,743	48,672	46,568	45,090	534,723

In 1884 the greatest number of births (49,175) was registered in June and the least (36,959) in February. The largest number of births usually occurs in the month of July, so that this year is somewhat abnormal.

11. The following table contrasts the recorded birth-rate in each Cantonment in British territory in 1883 and 1884 :—

Birth-rates in Cantonments.

Cantonments.	Birth-rate, 1883.	Birth-rate, 1884.
Devláli	8·08	12·13
Málegaon	55·29	32·80
Ahmednagar	12·86	17·21
Poona	6·87	22·50
Kirkee	15·72	13·10
Belgaum	9·18	13·25
Ahmedabad	12·71	7·36

There has been some improvement; but even in Poona it is much below what may be considered a normal birth-rate. There has been a falling off in Málegaon, but still this Cantonment is far ahead of all the others. It is evident that the registration is still performed in a perfunctory manner and much greater attention regarding it is required in each Cantonment.

Still-born.

12. During 1884, 5,784 boys and 4,848 girls, or a total of 10,632 children, against 4,868 boys and 4,025 girls, or a total of 8,893 in 1883, were registered as still-born. These births occurred in the following Collectorates :—

Collectorate.	Recorded Births.	Still-born.			Percentage of Still-born to born alive.
		Urban.	Rural.	Total.	
Khándesh	45,170	3	600	603	1·33
Násik	26,263	36	524	560	2·13
Thána	24,644	1	156	157	0·64
City of Bombay	14,377	1,463	...	1,463	10·18
Kolába	13,326	4	135	139	1·04
Ahmednagar	30,536	27	524	551	1·80
Poona	30,741	147	166	313	1·02
Sholápur	23,223	...	469	469	2·02
Sátára	45,484	53	893	946	2·08
Ratnágiri	20,599	5	417	422	2·05
Belgaum	35,139	32	669	701	1·99
Dhárwár	38,342	72	633	705	1·84
Kaládgi	24,847	6	400	406	1·63
Kánara	12,327	44	655	699	5·67
Surat	21,455	293	128	421	1·96
Broach	11,454	94	91	185	1·61
Kaira	30,225	5	273	278	0·92
Panch Maháls	8,926	4	114	118	1·32
Ahmedabad	28,844	297	254	551	1·91
Karáchi	10,637	95	116	211	1·98
Hyderabad	12,757	46	114	160	1·25
Thar and Párkar	5,014	3	121	124	2·47
Shikárpur	17,905	114	309	423	2·36
Upper Sind Frontier	2,488	7	20	27	1·08
Presidency ...	534,723	2,851	7,781	10,632	1·99

The high percentage of still-born to born alive in the City of Bombay (10·18) and in Kánara (5·67) should attract attention and investigation.

Deaths.

Number of deaths.

13. In 1884 among the civil population in the Town, Rural and Cantonment circles of the Presidency of Bombay the deaths of 214,376 males and 194,033 females, or a total of 408,409 persons, were recorded. In the previous year 420,198 deaths or 11,789 more than in 1884 were registered. The following statement shows the number of deaths registered in each year since 1874 :—

1874	... 278,652	1878	... 532,951	1882	... 343,418
1875	... 375,718	1879	... 387,542	1883	... 420,198
1876	... 368,260	1880	... 328,673	1884	... 408,409
1877	... 627,708	1881	... 381,450		

Excluding the famine years 1877-78, the recorded deaths in 1883 and 1884 were more numerous than in any of the series.

Death-rate.

14. The computed death-rate per 1,000 of population in 1884 was 24·82 against 25·53 in 1883, and exactly the same as the decennial mean. Omitting Sind, where the mortuary registration is extremely defective, the recorded death-rate in the other parts of the Presidency amounted to 26·12 per 1,000 of population.

Male and female death-rates.

15. The millesimal ratio of males dying to males living was 25·23 and of females dying to females living 24·39. In 1883 these ratios were respectively 26·02 and 25·02. For every 100 females who died 110·48 deaths among males were registered, but these proportions vary considerably in some of the districts: for example—

In Ratnágiri the ratio of male	to female deaths was	113·31	per cent.		
„ Broach	do.	do.	do.	115·26	„
„ Kaira	do.	do.	do.	114·88	„
„ Panch Maháls	do.	do.	do.	119·90	„
„ Ahmedabad	do.	do.	do.	113·38	„

As usual the greatest discrepancy is to be found in Sind.

In Karáchi 122·55 male deaths were recorded for every 100 female deaths.
,, Hyderabad 121·42 do. do. do. do.
,, Thar and Párkar 129·54do. do. do. do.
,, Shikárpur 124·12 do. do. do. do.
,, Upper Sind Frontier 123·57 do. do. do.

Deaths by districts.

16. The following table shows for each Registration District the population enumerated at the census of 1881, the number of deaths recorded in 1884 by sexes and their ratios per 1,000 of population. The highest ratio was reported in the Southern Registration District and the lowest in Sind:—

Districts.	Population by Census of 1881.			Number of Deaths.			Ratio per 1,000 of Population.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
Western Registration District	2,154,823	1,927,007	4,081,830	51,564	46,978	98,542	23·93	24·38	24·14
Central do. do.	2,137,095	2,156,681	4,293,776	51,586	47,553	99,139	24·14	22·06	23·09
Southern do. do.	1,417,136	1,390,118	2,807,254	44,753	42,397	87,150	31·58	30·50	31·04
Eastern Gujarát do. do.	1,471,834	1,386,897	2,857,731	43,440	38,444	81,899	29·51	27·73	28·65
Sind do. do.	1,316,830	1,096,993	2,413,823	23,027	18,661	41,688	17·49	17·01	17·27
Presidency ..	8,497,718	7,956,696	16,454,414	214,376	194,033	408,409	25·23	24·39	24·82

Deaths by Collectorates.

17. The next table shows the recorded deaths in each Collectorate in 1884 as compared with 1883 and the mean of the previous 10 years:—

Districts.	Number.	Collectorates.	Population according to Census of 1881.	Mean for 10 years, 1874—1883.		1883.		1884.	
				Number of Deaths.	Ratio per 1,000 of Population.	Number of Deaths.	Ratio per 1,000 of Population.	Number of Deaths.	Ratio per 1,000 of Population.
Western Registration District.	1	Khándesh	1,237,231	27,811	25·49	51,922	41·97	26,879	21·73
	2	Násik	781,206	19,570	26·15	26,404	33·80	19,194	24·57
	3	Thána	807,367	17,029	22·06	21,132	26·17	19,642	24·33
	4	City of Bombay	773,196	22,210	32·51	23,259	30·08	22,287	28·82
	5	Kolába	482,830	8,822	19·44	11,562	23·95	10,540	21·83
Central Registration District.	6	Ahmednagar	751,228	21,265	27·72	28,968	38·56	19,149	25·49
	7	Poona	900,621	20,481	22·62	25,763	28·60	21,332	23·68
	8	Sholápur	582,487	18,265	26·96	16,958	29·11	14,589	25·04
	9	Sátára	1,062,350	27,384	25·80	24,591	23·15	28,271	26·61
	10	Ratnágiri...	997,090	17,487	17·27	16,831	16·88	15,798	15·84
Southern Registration District.	11	Belgaum	864,014	30,474	33·24	19,208	22·23	27,993	32·40
	12	Dhárwár	882,907	31,578	33·01	19,195	21·74	30,170	34·17
	13	Kaládgi	638,493	23,026	30·19	13,699	21·46	16,327	25·57
	14	Kánara	421,840	13,808	32·82	11,018	26·11	12,660	30·01
Eastern Gujarát Registration District.	15	Surat	614,198	16,659	27·34	19,316	31·44	17,039	27·74
	16	Broach	326,930	9,928	28·91	9,114	27·88	11,493	35·15
	17	Kaira	804,800	21,795	27·61	20,209	25·11	23,023	28·60
	18	Panch Mahále	255,479	5,456	22·25	4,300	16·83	4,983	19·50
	19	Ahmedabad	856,324	23,676	28·26	20,167	23·55	25,352	29·60
Sind Registration District.	20	Karáchi	478,688	6,870	15·61	7,173	14·98	8,419	17·59
	21	Hyderabad	754,624	8,684	11·87	10,922	14·47	11,897	15·77
	22	Thar and Párkar... ...	203,344	2,551	13·60	3,896	19·16	3,163	15·55
	23	Shikárpur...	852,986	9,257	11·58	13,450	15·77	16,217	19·01
	24	Upper Sind Frontier ...	124,181	871	8·69	1,141	9·19	1,992	16·04

ABSTRACT.

Western Registration District	4,081,830	95,442	25·46	134,279	32·90	98,542	24·14
Central do. do.	4,293,776	104,882	23·71	113,111	26·34	99,139	23·09
Southern do. do.	2,807,254	98,386	32·35	63,120	22·48	87,150	31·04
Eastern Gujarát do. do.	2,857,731	77,514	27·44	73,106	25·58	81,890	28·65
Sind do. do.	2,413,823	28,233	12·50	36,582	15·16	41,688	17·27
Presidency ...	16,454,414	404,457	24·82	420,198	25·53	408,409	24·82

Sátára.	Panch Mahále.
Belgaum.	Ahmedabad.
Dhárwár.	Karáchi.
Kaládgi.	Hyderabad.
Kánara.	Shikárpur.
Broach.	Upper Sind Frontier.
Kaira.	

In the 13 marginally-noted Collectorates the recorded death-rate per 1,000 of population was higher than in 1883, the difference being most marked.

In Belgaum where 32·40 deaths per 1,000 were registered against 22·23 in 1883.
„ Dhárwár „ 34·17 do. do. do. 21·74 „
„ Broach „ 35·15 do. do. do. 27·88 „
„ Ahmedabad „ 29·60 do. do. do. 23·55 „
„ Upper Sind Frontier 16·04 do. do. do. 9·19 „

It was also higher than the annual mean of the preceding 10 years in the following 13 out of the 24 Collectorates, *viz.*:—

Thána.	Ahmedabad.
Kolába.	Karáchi.
Poona.	Hyderabad.
Sátára.	Thar and Párkar.
Dhárwár.	Shikárpur.
Broach.	Upper Sind Frontier.
Kaira.	

Death-rate by Collectorates in sequence.

18. The next table shows the deaths in 1884 by Collectorates in sequence of highest rates which range from 35·15 per 1,000 in Broach to 15·55 in Thar and Párkar. In 1883 the maximum ratio (41·97) was in Khándesh and the minimum (9·19) in the Upper Sind Frontier:—

Collectorates.	Number of Deaths.			Ratio per 1,000 of Population.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
Broach	6,154	5,339	11,493	36·52	33·69	35·15
Dhárwár	15,411	14,759	30,170	34·86	33·47	34·17
Belgaum	14,360	13,633	27,993	34·20	31·73	32·40
Kánara	6,672	5,988	12,660	29·91	30·11	30·01
Ahmedabad	13,471	11,881	25,352	30·65	28·49	29·60
City of Bombay	11,592	10,695	22,287	24·94	34·68	28·82
Kaira...	12,309	10,714	23,023	28·84	28·34	28·60
Surat...	8,795	8,244	17,039	28·74	26·75	27·74
Sátára	14,249	14,022	28,271	26·76	26·46	26·61
Kaládgi	8,310	8,017	16,327	26·16	24·98	25·57
Ahmednagar...	10,072	9,077	19,149	26·39	24·54	25·49
Sholápur	7,700	6,889	14,589	26·46	23·95	25·04
Násik...	10,105	9,089	19,194	25·43	23·68	24·57
Thána	10,130	9,512	19,642	24·35	24·31	24·33
Poona	11,173	10,159	21,332	22·32	22·80	23·68
Kolába	5,560	4,980	10,540	22·78	20·86	21·83
Khándesh	14,177	12,702	26,879	22·42	21·00	21·73
Panch Mahále	2,717	2,266	4,983	20·71	18·22	19·50
Shikárpur	8,981	7,236	16,217	19·48	18·46	19·01
Karáchi	4,636	3,783	8,419	17·43	17·79	17·59
Upper Sind Frontier ...	1,101	891	1,992	15·69	16·40	16·04
Ratnágiri	8,392	7,406	15,798	17·74	14·13	15·84
Hyderabad	6,524	5,373	11,897	16·02	15·47	15·77
Thar and Parkár	1,785	1,378	3,163	15·88	15·15	15·55
Presidency ...	214,376	194,033	408,409	25·23	24·39	24·82

Death-rate by sexes.

19. This statement also shows that in Kánara, City of Bombay and Upper Sind Frontier the death-rate for females is higher than the death-rate for males and in Kaira, Sátára, Thána, Poona, Karáchi and Thar and Párkar, the death-rates of males and females are nearly the same. In the remaining Collectorates the death-rate for males everywhere exceeds that for females. In 1883 the female death-rate exceeded that of males in the City of Bombay, Thána, Kánara and Karáchi.

20. The figures given below show the total deaths in 1884 under different ages, as also the ratio per 1,000 living, calculated on the population of each age period enumerated at the census of 1881, and the percentage on total deaths:—

Deaths by ages.

Ages.	Population.	Deaths.	Ratio per 1,000 of Population.	Percentage on total Deaths.
Under 1 year	457,644	97,143	214·02	23·79
1 and under 5 years...	1,714,283	86,887	50·68	21·28
5 do. 10 „	2,387,644	19,653	8·23	4·81
10 do. 15 „	1,877,474	11,954	6·37	2·93
15 do. 20 „	1,287,360	13,517	10·50	3·31
20 do. 30 „	2,984,550	36,806	12·33	9·01
30 do. 40 „	2,459,456	35,675	14·51	8·73
40 do. 50 „	1,543,353	31,119	20·16	7·62
50 do. 60 „	1,000,059	32,119	32·12	7·86
60 and upwards	742,591	43,536	58·63	10·66
Total ...	16,454,414	408,409	24·82	100·

The mortality amongst infants under 1 year and children above one year but under 5 is as usual terribly high, in comparison with other periods of life. In fact, the deaths in children under 5 years of age formed 45·07 per cent. of the total deaths. The extremely high rate of mortality among children of tender years affords unmistakable proof of local causes of insanitation throughout the Presidency. The period of greatest immunity was in the ages above 10 and under 15, the rate being 6·37per 1,000. For those "above 60 and upwards" the mortality was at the rate of 58·63 per 1,000. The percentage on total deaths amongst infants under one year is 23·79 against 21·35 in 1883. For those above 1 and under 5 the percentage on total deaths is 21·28 against 19·19 in 1883. For old people above 60 and upwards the percentage on total deaths is 10·66 against 10·38 in 1883. The total deaths by sexes under the different ages in 1884 in each Collectorate are given in Annual Form IV. in the Appendix.

21. The deaths by caste or class in each Collectorate are given in Annual Form No. V. in the Appendix. By the census of 1881 the Mahomedan population numbered 3,107,171 persons, amongst whom in 1884, 61,389 deaths were recorded against 57,522 in 1883, the death-rate per 1,000 being 19·76 against 18·51. The Hindu population amounted to 13,128,587 persons, amongst whom 339,283 deaths, or 25·71 per 1,000 of population, were reported during 1884. In 1883 the total deaths amongst this race was 355,827, equal to a death-rate of 27·10 per 1,000. Amongst the Christian population numbering 138,326 persons, 2,572 deaths were reported during the year against 2,690 in 1883, the death-rate being 18·59 against 19·45 per 1,000 in 1883. Under the heading "Other Castes" are included all those not belonging to either of the above sects, who by the census of 1881 numbered 80,330 persons, amongst whom during 1884 there were 5,165 deaths against 4,159 in 1883, the death-rate, being 64·30 against 51·77 in 1883. For Mahomedans the maximum rate (34·88 per 1,000) took place during the year in Kánara Collectorate; this is closely approached in the Dhárwár Collectorate, where the death-rate was 34·83 per 1,000, and the minimum (10·71) in Thar and Párkar. In 1883 these results were 42·51 and 7·98, and they were reported as having occurred in the Collectorates of Khándesh and Upper Sind Frontier. Amongst Hindus the maximum rate (35·19) in 1884 was in Broach Collectorate and the minimum (15·78) in Ratnágiri. In 1883 they occurred in Khándesh (41·90) and Ratnágiri (16·59). The maximum death-rate during the year amongst Christians was 33·05 and was reported from Belgaum Collectorate and the minimum (3·85) from Karáchi. In the Collectorates of Panch Maháls, Hyderabad, Thar and Párkar and Upper Sind Frontier no deaths amongst Christians were reported in 1884.

Deaths by caste or class.

22. The subjoined table shows the deaths in 1884 arranged according to the specified causes laid down by the Government of India and contrasted with the results for 1883 and the

Deaths by causes.

mean of the preceding 10 years. The causes of deaths will be more particularly noticed in the next section :—

Deaths by Causes.	Mean of 10 years, 1874-1883.		1883.		1884.	
	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.
Cholera	25,388	1·56	37,954	2·31	13,804	0·84
Small-pox	6,869	0·42	13,404	0·81	14,438	0·88
Fevers	263,385	16·16	266,741	16·21	276,989	16·83
Bowel-complaints	34,053	2·09	35,292	2·14	35,983	2·19
Injuries	6,443	0·40	5,978	0·36	5,570	0·34
Other Causes	68,319	4·19	60,829	3·70	61,625	3·74
All Causes ...	404,457	24·82	420,198	25·53	408,409	24·82

Deaths by months.

23. The monthly distribution of deaths in 1884 is shown in the following table contrasted with the deaths in 1883 and the mean for 10 years. As a rule as might be expected from its containing a fewer number of days February is the month in which the least number of deaths occur and the maximum usually takes place in August; but during 1884 the greatest number of deaths (42,175) took place in November and the least (29,298) in June. In 1883 the greatest number (47,283) was in July and the least (28,078) in October :—

Months.	Deaths from all Causes.					
	Mean for 10 years, 1874-1883.	Ratio per 1,000 of Population.	1883.	Ratio per 1,000 of Population.	1884.	Ratio per 1,000 of Population.
January...	31,858	1·95	32,142	1·95	32,796	1·99
February	27,818	1·72	30,004	1·82	29,626	1·80
March	30,486	1·87	33,148	2·02	32,431	1·97
April	30,405	1·87	33,281	2·02	30,785	1·87
May	32,204	1·98	35,490	2·16	30,820	1·87
June	32,342	1·99	39,819	2·42	29,298	1·78
July	37,249	2·28	47,283	2·87	31,201	1·90
August	40,508	2·48	42,178	2·56	36,007	2·19
September	36,547	2·24	31,463	1·91	35,507	2·16
October	34,782	2·13	28,078	1·71	39,330	2·39
November	35,991	2·21	32,519	1·98	42,175	2·56
December	34,267	2·10	34,793	2·11	38,433	2·34
Year ...	404,457	24·82	420,198	25·53	408,409	24·82

Number of Circles.

24. The statistical returns are received from 221 rural and 55 town circles from 7 Cantonments in British and 9 in Foreign territory. The aggregate population by the census of 1881 of the rural circles is 14,348,658, of the town circles 2,044,601, and of the Cantonments in British territory 61,155 or a total of 16,454,414 persons.

WESTERN REGISTRATION DISTRICT.

Collectorates.

1 Khándesh.
2 Násik.
3 Thána.
4 City of Bombay.
5 Kolába.

Khándesh.

25. The Collectorate of Khándesh is divided into 16 tálukás and 6 pethás forming 22 rural registration circles and 4 town (urban registration circles). The number of towns

SKELETON MAP
WESTERN REGISTRATION DISTRICT
BOMBAY PRESIDENCY
Scale, 40 Miles to 1 Inch
C. I. AGENCY
C. PROV:
BERAR
NIZAM'S TER:
GUJARAT
CENTRAL REGISTN DIST:
NERBUDDA R.
TAPTI R.
Taloda
Shahada
Shirpur
Nandurbar
Sindkhera
Nizampur
Chopra
Yaval
Sauda
Bhusawal
Amalner
Jalgaon
Pimpalner
DHULIA
Pardla
Erandol
Pachora
Jamner
Satana
Malegaon
Kalwan
Thengoda
Chandor
Pimpalgaon
Niphad
Yeola
NASIK
Sinnar
Dindori
PEINT
Umbargaon
Vevji
Chinchni
Tarapur
Palghar
Mahim
Wara
Agashi
Bassein
Bhiwandi
Kalyan
Murbad
Gorgaon
Wasawal
Bandora
Mahim
TANNA
Panwel
Neral
BOMBAY
Uran
Pen
ALIBAG
Chaul
Roha
MORUD
JANJIRA
Mangaon
Mahad
To Agra
To Indore
To Jubbulpore
To Burhanpur
To Nagpur
To Malkapur
To Aurangabad
From Dhanol
To Poona
To Baroda
Govt Photozinco Office, Poona 1885

and villages in this Collectorate is 2,683, and it covers an area of 9,944 square miles. The population of the Collectorate is 1,237,231, and the average density of population per square mile amounts to 124·42 persons. The recorded birth-rate during the year 1884 amongst the rural registration circles was higher than the reported death-rate in each táluka. The recorded birth-rate (41·57 per 1,000 of population) in the táluka of Sávda and its pethás "Yával and Ráver" was more than double the recorded death-rate (19·26 per 1,000) and in the táluka of Nasirabad the birth-rate (40·06 per 1,000) was nearly double the reported death-rate (20·34 per 1,000). Amongst the urban registration circles the towns of Nasirabad and Nandurbár show a lower birth-rate (14·33 and 16·01 per 1,000) than the death-rate ((21·49 and 16·50 per 1,000) respectively.

With the exception of these two towns an improvement is observed in the registration of births in this Collectorate.

During 1884, 26,879 persons died from all causes; the death rate, 21·73 per 1,000 of population, is considerably lower than what it was in 1883 (41·97 per 1,000) and the decennial mean of 25·49.

The maximum monthly mortality (3,160) took place in November, and the minimum (1,414) in July.

Cholera commenced in October in the táluka of Bhusával and disappeared in the same month after causing 8 deaths. Small-pox prevailed throughout the year to a small extent; 96 deaths were ascribed to it, whilst fever although less intense than last year was the cause of 21,367 deaths. The death-rate (17·27 per 1,000) from fever was nearly the same as that of the decennial mean, 17·36, but much below the death-rate (24·71) for 1883.

The following statement shows the number of births and the deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the zilla rate with that of 1883 and the mean of the previous 10 years:—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Khándesh.	Dhulia Rural Circle ..	59,688	757·16	78·83	152	..	..	5	·08	1,205	20·20	252	4·22	15	·25	62	1·04	1,539	25·78	2,565	42·97
	Amalner " ..	88,986	527·	168·85	225	..	..	10	·11	1,615	18·15	296	3·32	26	·29	56	·63	2,002	22·50	3,862	43·40
	Párola Petha " ..																				
	Erándol " ..	90,872	460·	197·55	198	..	..	4	·04	1,494	16·44	473	5·21	23	·25	57	·63	2,051	22·57	3,820	42·04
	Pichora " ..	100,051	535·	187·01	187	..	..	..	..	1,672	16·71	191	1·91	23	·23	41	·41	1,927	19·26	3,613	36·11
	Bhadgaon Petha " ..																				
	Chálisgaon " ..	59,031	504·	117·13	132	..	..	1	·02	916	15·50	140	2·37	9	·15	63	1·07	1,128	19·11	2,161	36·61
	Pimpalner " ..	87,549	1,339·	65·38	236	..	..	57	·65	1,442	16·47	243	2·78	15	·17	14	·16	1,771	20·23	2,468	28·19
	Nizámpur Petha " ..																				
	Nandurbár " ..	56,025	673·54	83·18	195	..	..	..	..	1,320	23·56	118	2·11	6	·11	15	·27	1,459	26·04	1,936	34·56
	Taloda " ..	49,783	1,177·	42·30	258	..	..	..	..	551	11·07	125	2·51	14	·28	5	·10	695	13·96	1,065	21·39
	Sháhádá " ..	64,368	479·	134·38	151	..	..	1	·02	1,119	17·38	216	3·36	22	·34	74	1·15	1,432	22·25	1,889	29·25
	Virdel " ..	61,461	504·	121·95	140	..	..	1	·01	1,332	21·67	351	5·71	14	·23	71	1·15	1,769	28·78	2,468	40·16
	Shirpur " ..	43,321	651·	66·55	99	..	..	1	·02	967	22·32	228	5·22	14	·32	5	·12	1,213	28·00	1,579	36·45
	Chopda " ..	45,903	367·52	124·90	91	..	..	..	..	927	20·19	200	4·36	11	·24	3	·07	1,141	24·86	1,800	39·21
	Sávda " ..																				
	Yával Petha " ..	141,745	553·	256·32	182	..	..	1	·01	2,112	14·90	497	3·51	29	·20	91	·64	2,8[illegible]3	19·20	5,893	41·57
	Ráver Petha " ..																				
	Bhusával " ..	96,160	571··	168·41	188	8	·08	14	·15	1,461	15·19	428	4·45	15	·16	41	·43	1,967	20·46	3,402	35·36
	Edalabad Petha " ..																				
	Nasirabad " ..	59,223	317·83	186·52	87	..	..	..	..	904	15·25	233	3·93	17	·29	52	·88	1,206	20·34	2,375	40·06
	Jamner " ..	83,535	525·	159·11	158	..	..	1	·01	1,696	20·30	287	3·44	17	·20	77	·92	2,078	24·87	3,405	40·76
	Dhulia Town Circle ..	18,449	1·84	10,026·63	1	..	..	..	..	179	9·70	24	1·30	3	·16	61	3·31	267	14·47	317	17·18
	Nandurbár " ..	6,841	0·46	14,871·74	1	..	..	..	..	105	15·35	36	5·26	3	·44	3	·44	147	21·49	98	14·33
	Chopda " ..	13,932	0·48	29,025·	1	..	..	..	..	186	13·35	..	..	2	·14	..	..	188	13·49	230	16·51
	Nasirabad " ..	10,243	0·17	60,252·94	1	..	..	..	..	165	16·11	1	·10	2	·19	1	·10	169	16·50	164	16·01
	1884 ..	1,237,231	9,944	124·42	2,683	8	·01	96	·08	21,367	17·27	4,336	3.50	280	·23	792	·64	26,879	21·73	45,170	36·51
	1883 ..					10,914	8·82	2,345	1·90	30,569	24·71	6,362	5·14	285	·23	1,447	1·17	51,922	41·97	39,876	32·23
	Mean for 10 years, 1874—1883 ..					2,838	2·60	1,021	0·94	18,949	17·36	3,793	3·48	298	·27	912	·84	27,811	25·49	28,705	26·31

N. B.—The births and deaths for Pethás are included in those for their respective Tálukas, as the population in them is not shown separately in the Census Report.

Amongst the rural circles the highest death-rate from all causes (28·78 per 1,000) although closely approached in the táluka of Shirpur (28·00) took place in the táluka of Virdel, and is the highest in the Collectorate. There was only 1

death from small-pox, whilst the death-rate from fevers was (21·67 per 1,000). The death-rate (5·71 per 1,000) from bowel-complaints in it is the highest in the Collectorate. From injuries the rate was 0·23 per 1,000 and from all other causes 1·15.

The next highest death-rate (26·04 per 1,000) took place in the táluka of Nandurbár in which no death from small-pox was recorded during the year, whilst the death-rate from fevers was 23·56 per 1,000. From bowel-complaints the rate was 2·11 and from injuries 0·11.

Of the rural registration circles the lowest recorded death-rate (13·96 per 1,000) from all causes occurred in the táluka of Taloda in which no death from small-pox was reported, whilst the death-rate (11·07) from fevers was the lowest amongst the rural registration circles. The death-rate from bowel-complaints was 2·51 and that from injuries 0·28.

The next lowest death-rate (19·11), which is nearly the same as that of the táluka of Páchora and its petha "Bhadgaon" (19·26) and the táluka of Sávda and its pethás "Yával and Ráver" (19·26), is found in the táluka of Chálisgaon, in which only 1 death took place from small-pox. The death-rate from fevers was 15·50, whilst the rate from bowel-complaints was 2·37 per 1,000. From injuries and other causes the rates were respectively 0·15 and 1·07 per 1,000.

Amongst the urban circles the highest death-rate (21·49 per 1,000) from all causes took place in the town of Nandurbár, in which no death from small-pox was reported, whilst the recorded death-rate from fevers was 15·35 per 1,000. The death-rate from bowel-complaints (5·26 per 1,000) in this town is the next highest in the Collectorate. From injuries and all other causes the death-rates are the same, 0·44 per 1,000 for each.

The lowest recorded death-rate, 13·49 per 1,000, occurred in the town of Chopda and which is also the lowest in the Collectorate. No death from small-pox took place in this town, whilst the death-rate from fevers was 13·35 per 1,000. No deaths were registered either from bowel-complaints or other causes; which throws a suspicion on the correctness of the registration. From injuries 2 deaths, or 0·14 per 1,000, were recorded during the year.

The recorded birth and death-rates in these towns in 1884 as compared with 1883 were as follows :—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Dhulia	6·50	17·18	20·71	14·47
Do. Nandurbár...	11·84	14·33	34·94	21·49
Do. Chopda	19·52	16·51	33·59	13·49
Do. Nasirabad	32·51	16·01	49·20	16·50

It is very evident that the registration of deaths as well as of births is neglected in these towns.

Násik.

26. The Collectorate of Násik is divided into 12 tálukás (rural circles), 2 towns (urban circles) and 2 Cantonments. The number of towns and villages in this Collectorate is 1,633 and its area covers 5,940 square miles. The population of the Collectorate is 781,206 and the average density per square mile amounts to 131·51 persons. The recorded birth-rate in 1884 amongst the rural registration circles was higher than the death-rate. In the táluka of Sinnar the birth-rate (44·11 per 1,000) was considerably higher than the death-rate (29·63) and in Nándgaon 46·61 and 27·50 per 1,000 respectively. Amongst the urban circles, both the towns of "Násik and Yeola" record lower birth-rates, 17·59 and 29·23 respectively, than the death-rates, 34·43 and 31·04 per 1,000; but in the Cantonments the birth-rate was higher than the death-rate.

The total recorded mortality from all causes in 1884 was 19,194 or 24·57 per 1,000 of population against 33·80 in 1883 and the decennial mean of 26·15.

The maximum monthly mortality (2,111) occurred in the month of October and the minimum (1,250) in February.

Cholera made its appearance in February, attained its maximum intensity in the month of April, and disappeared in June; but again re-appeared in August. It totally disappeared in the month of December after causing, during the year, 76 deaths. Small-pox was prevalent throughout the year and caused 599 deaths or 0·77 per 1,000 against 0·67 in 1883 and the decennial mean of 0·67. The death-rate from fevers was 18·54 against 21·12 per 1,000 in 1883 and a decennial mean of 18·58.

The following table shows the number of recorded births and the deaths by causes and their ratios per 1,000 in each táluka, town, and Cantonment in the Collectorate, and compares the Zilla rate with that of 1883 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel Complaints. Number.	Bowel Complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Násik	Násik Rural Circle	67,910	464·44	146·22	135	6	·09	99	1·46	1,261	18·57	115	1·69	5	·07	225	3·31	1,711	25·19	1,906	28·07
	Sinnar ,,	66,081	519·	127·32	99	..	..	37	·56	1,430	21·64	196	2·97	8	·12	287	4·34	1,958	29·63	2,915	44·11
	Igatpuri ,,	68,749	376·	182·84	123	30	·44	40	·58	1,142	16·70	84	1·22	12	·17	93	1·35	1,407	20·46	1,835	26·69
	Dindori ,,	72,230	529·	136·54	128	..	..	54	·75	1,334	18·32	232	3·21	14	·19	249	3·44	1,873	25·91	2,499	34·57
	Niphád ,,	87,522	411·	212·95	121	..	..	101	1·15	1,552	17·73	267	3·05	20	·23	233	2·66	2,173	24·82	2,676	30·57
	Chándor ,,	50,899	385·	132·21	108	..	..	53	1.04	839	16·48	149	2·93	8	·16	96	1·89	1,145	22·50	1,735	34·09
	Yeola ,,	35,597	411·73	86·45	117	..	..	3	·09	657	18·46	96	2·69	7	·20	51	1·43	814	22·87	1,191	33·46
	Nándgaon ,,	30,399	437·	69·56	88	8	·26	10	·33	733	24·23	63	2·07	5	·16	12	·39	836	27·50	1,417	46·61
	Málegaon ,,	74,718	775·	96·41	144	..	..	13	·17	1,449	19·39	162	2·17	9	·12	37	·50	1,670	22·35	2,836	37·59
	Báglán ,,	64,875	619·	104·81	155	..	..	74	1.14	1,183	18·24	261	4·02	6	·09	45	·69	1,569	24·18	2,436	37.23
	Kalvan ,,	58,486	554·	105·57	187	..	..	87	1·49	1,129	19·30	172	2·94	7	·12	82	1·40	1,477	25·25	2,119	36·56
	Peint ,,	55,144	458·	120·40	221	..	..	..	..	1,019	18·48	3	·05	10	·18	17	·31	1,049	19·02	1,597	28·96
	Násik Town Circle	24,101	0·56	43,037·50	1	32	1·33	12	·50	416	17·26	105	4·35	11	·45	254	10·54	830	34·43	424	17·59
	Yeola ,,	17,685	0·22	80,386·36	1	..	..	16	·90	272	15·38	31	1·75	3	·17	227	12·84	549	31·04	517	29·23
	Devlíli Cantonment	2,969	*	..	..	..	..	..	..	10	3·37	1	·34	..	...	15	5·05	26	8·76	36	12·13
	Málegaon ,,	3,780	*	..	..	..	..	..	..	57	15·08	1	·26	..	..	49	12·96	107	28·30	124	32·80
	1884	781,206	5,949	131·51	1,633	76	·10	599	·77	14,434	18·54	1,938	2·48	125	·16	1,972	2·52	19,194	24·57	26,265	33·62
	1883					4,193	5·36	525	·67	16,486	21·12	2,493	3·19	143	·18	2,564	3·28	28,404	33·80	24,214	30·99
	Mean for 10 years, 1874—1883					1,212	1·62	502	·67	13,908	18·58	1,690	2·26	166	·22	2,092	2·80	19,570	26·15	20,913	27·94

* *N.B.*—The areas in square miles of the Cantonments of Devlíli and Málegaon are included in the towns of Násik and Málegaon respectively as they are not separately shown in the Census Report.

Amongst the rural circles the highest death-rate from all causes (29·63 per 1,000) took place in the táluka of Sinnar in which no death from cholera was reported. Small-pox caused 37 deaths or 0·56 per 1,000, whilst the death-rate from fevers was 21·64 per 1,000. From bowel-complaints the rate was 2·97 and from injuries 0·12. The death-rate from all other causes (4·34 per 1,000) was the highest among the rural circles.

The next highest death-rate from all causes (27·50 per 1,000) occurred in the táluka of Nándgaon in which eight deaths from cholera were recorded. From small-pox there were 10 deaths or 0·33 per 1,000, whilst the death-rate from fevers (24·28 per 1,000) was the highest in the Collectorate. From bowel-complaints the death-rate was 2·07 and from injuries 0·16 per 1,000. The rate from all other causes was 0·39 per 1,000.

The highest death-rate from bowel-complaints (4·02 per 1,000) amongst the rural circles took place in Báglán Táluka.

In the urban circles the highest death-rate from all causes (34·43 per 1,000) in the Collectorate was reported in the town of Násik, in which 32 deaths took place from cholera. The death-rate from this cause (1·33 per 1,000) was the highest in the Collectorate. From small-pox there were 12 deaths or 0·50 per 1,000, whilst from fevers the death-rate was 17·26 per 1,000. The death-rate (4·35 per 1,000) from bowel-complaints was the highest in the Collectorate. This points unmistakably, in my opinion, to an impure water-supply. From injuries the death-rate was 0·45 per 1,000. The death-rate from other causes (10·54 per 1,000) was exceptionally high.

At the town of Yeola the death-rate from all causes (31·04 per 1,000) was the next highest in the Collectorate. No death from cholera was reported. The rate from small-pox was 0·90 per 1,000, whilst that of fevers 15·38. From bowel-complaints the rate was 1·75 per 1,000, and the rate 12·84 from other causes was the high one.

Among the Cantonments no deaths from cholera were recorded; the reported death-rate from all causes (8·76 per 1,000) in the Cantonment of Devláli was the lowest in the Collectorate. At Málegaon Cantonment a death-rate of 28·30 per 1,000 was recorded from all causes. The death-rate from fevers was 15·08 per 1,000 and that from other causes (12·96 per 1,000) was the highest in the Collectorate.

The recorded birth and death rates in these towns and Cantonments in 1884 as compared with 1883 were as follows:—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Násik	24·94	17·59	61·08	34·43
Do. Yeola	35·00	29·23	39·53	31·04
Cantonment of Devláli	8·08	12·13	15·16	8·76
Do. Málegaon	55·29	32·80	43·65	28·30

The registration of births and deaths, though far from being correct, is fairly carried out in the rural registration circles. The registration of births is much neglected in Násik Town and in Devláli Cantonment, where however the low death-rate may possibly be due to the fluctuating nature of the population.

Thána.

27. The Collectorate of Thána is divided into 10 tálukás and two towns. The statistics of births and deaths of Panvel Táluka and town which until 1883 formed part of this Collectorate are now incorporated in the Kolába Collectorate. The Zilla, therefore, now contains 1,882 towns and villages and covers an area of 3,936 square miles. The population of the Collectorate is 807,367 and the average density per square mile amounts to 205·12 persons. In all the rural registration circles the recorded birth-rate per 1,000 of population was higher than the death-rate. The most notable instance was the táluka of Váda in which the birth-rate was 36·45 per 1,000 and the death-rate 22·85. The towns of Thána and Kalyán record considerably lower birth-rates,—15·98 and 13·32 respectively, than the death-rates, 22·00 and 21·30 per 1,000. Neither the birth or death rates can be correct and as they stand show unmistakably that the attention of the Municipalities of these towns has not been properly paid to the registration of vital statistics.

The number of deaths from all causes in 1884 was 19,642, the recorded death-rate being 24·33 against 26·17 per 1,000 in 1,883 and a decennial mean of 22·06.

The maximum monthly mortality (2,441) took place in December, and the minimum (1,065) in July.

Cholera was present at the close of 1883, and in 1884 attained its maximum intensity in December. Five hundred and fifty-eight deaths or 0·69 per 1,000 of population were ascribed to it. Small-pox prevailed in the Collectorate

throughout the year and caused 524 deaths against 1,508 in 1883, the death-rate being 0·65 per 1,000 against 1·87 in 1883 and a decennial mean of 0·54. The deaths from fevers amounted to 15,845 or 19·63 per 1,000 against 15,457 or 19·14 in 1883. The mean of 10 years was 16·74.

The following statement shows the number of births and the deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the Zilla rate with that of 1883 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel Complaints. Number.	Bowel Complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Thána.	Dáhánu Rural Circle	109,322	643	170·02	299	46	·42	8	·03	1,916	17·53	45	·41	65	·59	191	1·75	2,266	20·73	3,326	30·42
	Máhim " ..	77,360	419	184·63	186	48	·62	28	·36	1,269	16·40	11	·14	31	·40	73	·94	1,460	18·87	2,218	28·67
	Váda " ..	36,493	310	117·72	153	..	..	12	·33	753	20·63	10	·28	21	·58	38	1·04	834	22·85	1,330	36·45
	Sháhápur " ..	107,729	870	123·83	273	2	·02	103	·96	2,190	20·33	23	·21	55	·51	107	·99	2,480	23·02	3,273	30·38
	Murbád " ..	63,934	361	182·15	171	25	·39	108	1·69	1,249	19·54	5	·08	25	·39	162	2·53	1,574	24·62	2,069	32·36
	Kalyán " .	65,078	275·50	236·23	222	36	·55	139	2.14	1,544	23·72	32	·49	33	·51	363	5·58	2,147	32·99	2,389	36·71
	Bhiwndi " ..	75,365	250	301·45	194	111	1·47	1	·01	2,084	27·65	26	·35	38	·50	122	1·67	2,386	31·66	2,655	35·36
	Bassein " ..	68,967	221	312·07	92	44	·64	1	·01	1,167	16·92	16	·23	23	·33	157	2·28	1,408	20·41	1,669	24·20
	Sálsette " ..	93,693	234·02	400·38	112	19	·20	53	·57	1,633	17·43	86	·92	35	·37	447	4·77	2,273	24·26	2,400	25·62
	Karjat " ..	82,062	353	232·47	268	191	2·33	75	·91	1,656	20·20	13	·16	26	·32	258	3·14	2,221	27·06	2,902	35·38
	Thána Town Circle .	14,456	6·93	2,071·06	1	..	..	..	..	249	17·22	2	·14	4	·28	63	4·36	318	22·00	231	15·98
	Kalyán " ..	12,910	2·50	51·64	1	36	2·79	1	·08	133	10·30	4	·31	7	·54	94	7·28	275	21·30	172	13·32
	1884 ..	807,367	3,935	205·12	1,882	568	·69	524	·65	15,845	19·63	273	·34	363	·45	2,079	2·57	19,642	24·33	24,644	30·52
	1883 ..					1,584	1·96	1,508	1·87	15,457	19·14	288	·36	359	44	1,936	2·40	21,122	26·17	23,652	29·17
	Mean for 10 years, 1874—1883 ..					1,341	1·74	421	·54	12,923	16·74	276	·36	395	·51	1,673	2·17	17,029	22·06	1,8553	24·04

N. B.—The statistics of Panvel Táluka and Town are excluded from this District for 1883 and the mean for 10 years, 1874—1883.

Amongst the rural registration circles the highest recorded death-rate from all causes (32·99 per 1,000) took place in the táluka of Kalyán in which cholera carried off 36 persons or 0·55 per 1,000. Small-pox caused 139 deaths; the recorded death-rate (2·14 per 1,000) is the highest in the Collectorate, whilst the death-rate from fevers was 23·72 per 1,000. From bowel-complaints the death-rate was 0·49 per 1,000 and from injuries 0·51 per 1,000. A high death-rate (5·58 per 1,000) from other causes is recorded in this táluka.

The next highest death-rate from all causes (31·66 per 1,000) is found in Bhiwndi Táluka, in which 111 deaths or 1·47 per 1,000 were recorded from cholera. There was only one death from small-pox, whilst from fevers 2,084 deaths were recorded. The death-rate (27·65 per 1,000) is the highest in the Collectorate. From bowel-complaints and injuries the rates were respectively 0·35 and 0·50 per 1,000.

Amongst the rural circles the highest death-rate from cholera (2·33 per 1,000) took place in Karjat Táluka.

The lowest death-rate from all causes (18·87 per 1,000) is found in Máhim Táluka, in which 48 deaths or 0·62 per 1,000 from cholera were recorded. There were 28 deaths or 0·36 per 1,000 from small-pox, whilst the death-rate from fevers was 16·40 per 1,000. From bowel-complaints and injuries the rates were respectively 0·14 and 0·40 per 1,000, and from other causes 0·94 per 1,000.

In the towns of Thána and Kalyán the reported death-rates from all causes were 22·00 and 21·30 respectively. No deaths were recorded from cholera in the former but 36 in the latter. The death-rate from cholera (2·79 per 1,000) in the town of Kalyán is the highest in the Collectorate. From small-pox there was no death recorded in the town of Thána but only one in Kalyán. The recorded

death-rate from fevers in Thána was 17·22 per 1,000 and in Kalyán 10·30 which is the lowest in the Collectorate. From bowel-complaints the rates were respectively 0·14 and 0·31 per 1,000 and from injuries 0·28 and 0·54. The death-rate (7·28 per 1,000) from other causes in the town of Kalyán is the highest in the Collectorate.

The recorded birth and death rates in these towns in 1884 as compared with 1883 were as follows:—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Thána	18·61	15·98	19·78	22·00
Do. Kalyán	3·95	13·32	19·13	21·30

The above figures show, as before noticed, that the registration of births and deaths is greatly neglected in these towns.

In the tálukás also the registration of vital statistics except in Kalyán and Bhiwndi is also very lax. In Váda, Dáhánu, Murbád and Karjat tálukás much attention seems to be paid to the registration of births; but the recorded death-rate in these places cannot be accepted as correct.

Bombay.

28. The City of Bombay covers an area of 22 square miles and the total population is 773,196. The average density per square mile amounts to 35,145·27 persons. The number of recorded deaths from all causes in 1884 was 22,287, the death-rate being 28·82 against 30·08 per 1,000 in 1883 and a decennial mean of 32·51.

The maximum monthly mortality (2,013) took place in January and the minimum (1,631) in June.

Cholera attained its maximum intensity in January and prevailed more or less throughout the year. Five hundred and sixty-eight deaths or 0·73 per 1,000 were ascribed to it. Small-pox caused 112 deaths or 0·14 per 1,000 against 1·85 in 1883 and a decennial mean of 1·05. The death-rate from fevers (8·80 per 1,000) was below the mean of 10 years (10·61 per 1,000) but higher than in 1883 (7·47 per 1,000). From bowel-complaints the death-rate was 2·16 per 1,000 against 2·29 in 1883 and a decennial mean of 3·20. The death-rate from injuries (0·39 per 1,000) was lower than in the previous year (0·44 per 1,000) and the mean of 10 years (0·47 per 1,000). From other causes the death-rate was 16·60 against 16·72 per 1,000 in 1883 and a decennial mean of 16·16.

The following table shows the number of deaths by causes and ratio per 1,000 of population and compares the death-rate with that of 1883 and the mean of the previous 10 years:—

Years.	Population.	Cholera.		Small-pox.		Fevers.		Bowel-complaints.		Injuries.		Other Causes.		All Causes.	
		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
1884	773,196	568	0·73	112	0·14	6,801	8·80	1,672	2·16	302	0·39	12,832	16·60	22,287	28·82
1883		1,014	1·31	1,431	1·85	5,775	7·47	1,769	2·29	339	0·44	12,931	16·72	23,259	30·08
Mean of 10 years, 1874—1883 ..		699	1·02	720	1·05	7,249	10·61	2,188	3·20	321	0·47	11,023	16·16	22,210	32·51

The next statement shows the number of recorded deaths from all causes in the City of Bombay from 1853 to 1884, and the ratio per 1,000 of population since 1864:—

	No. of Deaths from all Causes.	Ratio per 1,000 of Population.		No. of Deaths from all Causes.	Ratio per 1,000 of Population.
1853	13,647	...	1869	18,293	22·40
1854	17,550	...	1870	15,459	18·93
1855	14,862	...	1871	16,653	20·40
1856	14,761	...	1872	19,759	30·66
1857	17,826	...	1873	16,092	24·97
1858	14,342	...	1874	15,132	23·48
1859	14,249	...	1875	18,295	28·39
1860	14,409	...	1876	20,553	30·66
1861	15,014	...	1877	33,223	51·55
1862	15,809	...	1878	26,686	41·41
1863	18,696	...	1879	22,294	34·60
1864	25,015	30·64	1880	20,873	32·39
1865	28,531	34·92	1881	21,553	27·87
1866	17,351	21·25	1882	20,229	26·16
1867	16,088	19·70	1883	23,259	30·08
1868	16,254	19·91	1884	22,287	28·82

Kolába.

29. The Collectorate of Kolába is divided into 6 tálukás and 1 petha forming 7 rural circles and 3 town circles. Owing to the transfer of the Panvel Táluka and town from the Thána Collectorate, it now contains 1,194 towns and villages and covers an area of 1,803 square miles. The population of the Collectorate is 482,830 and the average density per square mile amounts to 267·79 persons. With the exception of the town of Mahád the recorded birth-rate in each táluka and town is higher than the recorded death-rate. In the town of Mahád owing to defective registration, a birth-rate of only 19·69 per 1,000 was recorded and a death-rate of 23·52 per 1,000.

The number of deaths from all causes in 1884 was 10,540, the death-rate being 21·83 per 1,000 against 23·95 in 1883 and a decennial mean of 19·44.

The maximum monthly mortality (1,104) took place in January and the minimum (676) in May.

Cholera was present at the close of 1883 and in 1884 attained its maximum intensity in August. It disappeared in November but re-appeared in December; 627 deaths, or 1·30 per 1,000 against 2·31 in 1883, were ascribed to it. Small-pox prevailed throughout the year and caused 283 deaths or 0·59 per 1,000 against 481 or 1·00 in 1883. The death-rate from fevers (15·76 per 1,000) was above the decennial mean (13·45) but slightly below the rate in 1883 (15·90).

The following table shows the number of births and the deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate and compares the Zilla rate with that of 1883 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Town and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Kolaba.	Panvel Rural Circle	90,330	304	298·78	218	116	1·27	29	0·32	1,984	21·86	31	0·34	31	0·34	235	2·58	2,426	26·71	3,013	33·17
	Alibág	69,762	198·40	360·61	171	68	0·97	16	0·23	1,181	16·92	54	0·77	25	0·36	436	6·25	1,780	25·51	2,370	33·97
	Pen .. .. .. } Nágothna Petha.	70,200	290	242·07	199	85	1·21	56	0·80	1,301	18·53	37	0·53	13	0·18	166	2·36	1,658	23·61	2,192	31·22
	Roha	44,835	200	224·18	183	68	1·52	64	1·43	750	16·73	21	0·47	17	0·38	167	3·72	1,087	24·25	1,468	32·74
	Mángaon	81,085	353	229·70	225	206	2·54	66	0·81	1,335	16·47	122	1·51	33	0·41	236	2·91	1,998	24·65	2,279	28·11
	Mahád	102,587	458·57	223·71	245	53	0·52	38	0·37	899	8·76	58	0·57	31	0·30	161	1·57	1,240	12·09	1,529	14·90
	Panvel Town Circle	10,351	3	3,450·33	1	2	0·19	..	..	46	4·44	1	0·10	3	0·29	15	1·45	67	6·47	178	17·[illegible]
	Alibág	6,376	0·60	10,626·67	1	..	..	..	..	57	8·94	..	..	1	0·16	66	10·35	124	19·45	162	25·41
	Mahád	6,804	0·43	15,823·26	1	29	4·26	14	2·06	54	7·94	1	0·14	2	0·29	60	8·83	160	23·52	134	19·69
	1884 ..	482,830	1,803	267·79	1,194	627	1·30	283	0·59	7,607	15·76	325	0·67	156	0·32	1,542	3·19	10,540	21·83	13,326	27·60
	1883 ..					1,114	2·31	481	1·00	7,679	15·90	75	0·15	187	0·39	2,026	4·20	11,562	23·95	13,343	27·63
	Mean for 10 years, 1874—1883 ..					772	1·70	205	0·45	6,101	13·45	211	0·46	166	0·37	1,367	3·01	8,822	19·44	9,482	20·9[illegible]

N. B.—The births and deaths in Nágothna Petha are included in Pen Táluka as in the Census Report the population living in each is not shown separately. The statistics of Panvel Táluka and Town are included in this district for 1883 and the mean for 10 years, 1874—1883.

Amongst the rural circles, and also in the Collectorate, the highest recorded death-rate from all causes (26·71 per 1,000) took place in Panvel Táluka, in which there were 116 deaths from cholera or 1·27 per 1,000 and 29 or 0·32 per 1,000 from small-pox. The death-rate from fevers (21·86 per 1,000) is the highest in the Collectorate. The rate from bowel-complaints and injuries was 0·34 per 1,000 each, whilst from other causes the death-rate was 2·58 per 1,000.

Amongst the rural circles the highest death-rate from cholera (2·54 per 1,000) and in the Collectorate the highest death-rate from bowel-complaints (1·51 per 1,000) took place in Mángaon Táluka.

The lowest recorded death-rate (12·09 per 1,000) occurred in Mahád Táluka, in which cholera carried off 53 persons or 0·52 per 1,000. From small-pox there were 38 deaths or 0·37 per 1,000, whilst the death-rate from fevers (8·76 per 1,000) is the lowest amongst the rural circles. From bowel-complaints and injuries the death-rates were respectively 0·57 and 0·30 and from other causes 1·57 per 1,000.

Amongst the urban circles the highest death-rate, 23·52 per 1,000 was recorded in the town of Mahád; 29 deaths out of a population of 6,804 took place from cholera; the death-rate 4·26 per 1,000 is the highest in the Collectorate. There were 14 deaths from small-pox or 2·06 per 1,000, which is also the highest in the Collectorate. From fevers the rate was 7·94 per 1,000. There was only 1 death from bowel-complaints, and two persons died from injuries in this town. From other causes the death-rate was 8·83 per 1,000.

It will be seen that during the year only 67 deaths equal to a rate of 6·47 per 1,000 of population were registered in the town of Panvel. The recorded birth-rate was only 17·29 per 1,000. Such results prove conclusively how utterly neglected the registration of vital statistics is in this town, and I hope that Government will be pleased to notice this neglect of the Municipality, as it deprives our statistical returns of the value they would possess if ordinary attention were paid to them. If any further evidence were required of the defective nature of registration in this town it would be afforded by the fact that

SKELETON MAP
CENTRAL REGISTRATION DISTRICT
BOMBAY PRESIDENCY
Scale. 40 Miles to 1 Inch
WESTERN REGISTN DIST:
NIZAM'S TER:
SOUTHERN REGISTN DIST:
SEA
AHMEDNAGAR
SATARA
SHOLAPUR
RATNAGIRI
From Bombay
To Aurangabad
To Hyderabad
From Gadag
From Belgaum
Sangamner
Rahuri
Sheogaon
Parner
Khed
Karjat
Karmala
Barsi
Madha
Mohol
Pandharpur
Sangola
Mangalvedha
Khatav
Phaltan
Wai
Chiplun
Dapoli
Khed
Vishalgarh
Rajapur
Vizadury
Khirapatan
Deogarh
Malwan
Vengurla
Govt Photozincoo Office Poona 1885

only one death from bowel-complaints was recorded to have taken place during the year.

The same fact is noticed in Mahád, whilst in Alíbág no death from bowel-complaints is recorded.

The recorded birth and death rates in these towns in 1884 as compared with 1883 were as follows:—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Panvel	11·88	17·29	45·11	6·47
Do. Alíbág	27·13	25·41	37·95	19·45
Do. Mahád	10·58	19·69	24·10	23·52

Such results are entirely untrustworthy. The registration of vital statistics throughout the Kolába Collectorate is evidently in need of great improvement, and it is hard that the value of our statistics should be so seriously vitiated.

CENTRAL REGISTRATION DISTRICT.

Collectorates.

1. Ahmednagar.
2. Poona.
3. Sholápur.
4. Sátára.
5. Ratnágiri.

Ahmednagar.

30. The Collectorate of Ahmednagar is divided into 11 rural, 2 town and 1 Cantonment circles. It contains 1,334 towns and villages and covers an area of 6,666 square miles. The population of the Collectorate is 751,228 and the average density per square mile amounts to 112·69 persons. With the exception of the town of Ahmednagar, in which the birth-rate is slightly below the death-rate, the birth-rate in each registration circle in the Collectorate is higher than the death-rate. Amongst the rural circles in the Shevgaon Táluka the recorded birth-rate (39·36 per 1,000) was more than double the recorded death-rate (19·20 per 1,000), whilst in the tálukás of Jámkhed and Sangamner the birth-rate is nearly double the recorded death-rate, 46·34 per 1,000 against 24·52 for the former and 46·29 against 24·59 for the latter. The birth-rate in the town of Sangamner (45·13) is also more than double the recorded death-rate (22·40 per 1,000). This fact raises a well grounded suspicion that all the deaths were not registered.

The number of deaths from all causes in 1884 was 19,149, the death-rate being 25·49 per 1,000 against 38·56 in 1883 and a decennial mean of 27·72.

The maximum monthly mortality (2,385) took place in October and the minimum (1,099) in February.

Cholera commenced in May and disappeared in July after causing 24 deaths or 0·03 per 1,000 of population. Small-pox was prevalent throughout the year to a very slight extent and caused 50 deaths or 0·07 per 1,000 against 352 or 0·47 in 1883 and a decennial mean of 277 or 0·36. The death-rate from fevers (19·07 per 1,000) was slightly above the decennial mean (18·07) and slightly lower than the rate in 1883 (20·77).

The following statement shows the number of births and the deaths by causes and their ratios per 1,000 in each táluka, town and Cantonment in the Collectorate, and compares the Zilla rate with that of 1883 and the mean of the previous 10 years:—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
AHMEDNAGAR.	Nagar Rural Circle.	71,458	618·59	115·53	108	..	..	2	0·03	1,498	20·96	264	3·69	10	0·14	218	3·05	1,992	27·87	3,001	42·00
	Akola ,, ..	60,800	588	103·40	156	18	0·30	7	0·11	1,231	20·25	127	2·09	31	0·51	222	3·65	1,636	26·91	2,205	36·27
	Jámkhed ,, ..	60,960	482	126·47	75	..	..	18	0·29	1,238	20·31	182	2·99	18	0·29	39	0·64	1,495	24·52	2,825	46·34
	Párner ,, ..	73,701	779	94·61	122	..	..	..	..	1,638	22·22	160	2·17	10	0·14	249	3·38	2,057	27·91	2,905	39·40
	Shrigonda ,, ..	51,291	625	82·06	84	..	..	7	0·13	1,143	22·23	102	1·99	8	0·16	105	2·07	1,366	26·63	1,838	35·83
	Karjat ,, ..	34,820	580	60·03	79	..	..	8	0·23	728	20·91	137	3·93	6	0·17	81	2·33	960	27·57	1,605	46·09
	Nevása ,, ..	78,158	607	128·76	145	..	..	5	0·06	1,283	16·42	207	2·65	15	0·19	360	4·61	1,870	23·93	3,156	[illegible]
	Kopargaon ,, ..	63,789	511	124·83	121	6	0·09	..	..	1,476	23·14	167	2·62	9	0·14	112	1·76	1,770	27·75	2,[illegible]	40·46
	Sangamner ,, ..	59,561	707·41	84·20	151	..	..	3	0·05	1,038	17·43	97	1·63	10	0·17	316	5·31	1,464	24·59	[illegible]	46·29
	Ráhuri ,, ..	63,289	497	127·34	111	..	..	..	..	1,247	19·70	105	1·66	8	0·13	116	1·83	1,476	[illegible]	2,679	42·33
	Shevgaon ,, ..	37,113	670	130·02	180	..	..	..	..	1,294	14·85	230	2·64	7	0·08	142	1·63	1,673	19·20	3,429	39·36
	Ahmednagar Town Circle.	32,003	0·50	658·06	1	..	..	..	..	374	11·37	118	3·58	7	0·21	619	18·81	1,[illegible]	33·97	1,079	32·80
	Sangamner ,, ..	8,798	0·59	14906·47	1	..	..	..	..	115	13·08	3	0·34	4	0·45	75	8·53	197	22·40	397	45·13
	Ahmednagar Cantonment.	4,589	..	..	..	..	..	..	..	24	5·23	4	0·87	3	0·65	44	9·59	75	16·34	79	17·21
	1884 ..	7,51,228	6,666	112·69	1,284	24	0·03	60	0·07	14,327	19·07	1,903	2·53	146	0·20	2,699	3·59	19,149	25·49	30,536	40·65
	1883 ..	7,368	9·81	352	·47	15,606	20·77	2,477	3·30	134	·20	3,011	4·01	28,968	38·56	28,571	38·03
	Mean for 10 year, 1874—1883 ..	2,147	2·80	277	·36	13,867	18·07	2,047	2·67	181	·24	2,746	3·58	21,365	27·72	22,230	28·98

N.B.—The area in square miles for the Cantonment of Ahmednagar is included in the town of Ahmednagar, as it is not separately shown in the Census Report.

Amongst the rural circles the highest death-rate (27·91) from all causes, which is nearly the same as that in the tálukás Nagar (27·87), Kopargaon (27·75), and Karjat (27·57), took place in Párner Táluka, in which no deaths were recorded either from cholera or small-pox, whilst the death-rate from fevers was 22·22 per 1,000. There were 160 deaths or 2·17 per 1,000 from bowel-complaints and 10 or 0·14 per 1,000 from injuries. The rate from other causes was 3·38 per 1,000.

The next highest death-rate (26·91 per 1,000) which is nearly the same as that of Shrígonda Táluka (26·63), occurred in Akola Táluka, in which cholera carried off 18 persons. The death-rate from small-pox was 0·11, whilst that of fevers 20·25. From bowel-complaints the rate was 2·09 and from injuries 0·51 per 1,000. From other causes the death-rate was 3·65.

The highest death-rate from fevers (23·14) took place in Kopargaon Táluka and from bowel-complaints (3·93 per 1,000) in Karjat Táluka. Cholera prevailed in Akola and Kopargaon Tálukás to only a very slight extent. The death-rate from this disease in the former was 0·30 and in the latter 0·09 per 1,000.

The lowest recorded death-rate (19·20 per 1,000) is found in Shevgaon Táluka. No deaths either from cholera or small-pox were recorded during the year, whilst the death-rate from fevers (14·85 per 1,000) is the lowest in the rural circles. The death-rate from bowel-complaints was 2·64 per 1,000 and that for injuries 0·08. From other causes the rate was 1·63.

In the urban circles the town of Ahmednagar shows the highest death-rate (33·97 per 1,000) from all causes in the Collectorate. No deaths were recorded either from cholera or small-pox, whilst the death-rate from fevers was 11·37 per 1,000. A high death-rate (3·58 per 1,000) from bowel-complaints is observed in this town. The remarkably high death-rate (18·81 per 1,000) from

other causes shows that the deaths were improperly recorded under their respective heads..

In the town of Sangamner the recorded death-rate from all causes was 22·40 per 1,000. Cholera and small-pox caused no deaths in this town, whilst the rate from fevers was 13·08. The death-rate (0·34 per 1,000) from bowel-complaints in this town is the lowest in the Collectorate. From injuries the rate was 0·45 and from other causes 8·53 per 1,000.

The death-rate (16·34 per 1,000) of population in the Cantonment of Ahmednagar is the lowest recorded in the Collectorate. There were no deaths either from cholera or small-pox. The death-rate (5·23) from fevers is the lowest recorded in the Collectorate. Bowel-complaints caused only 4 deaths or 0·87 and injuries 3 or 0·65 per 1,000. The death-rate from other causes was 9·59 per 1,000.

The recorded birth and death-rates in these towns and Cantonment in 1884 as compared with 1883 were as follows :—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Ahmednagar	28·39	32·80	32·46	33·97
Do. Sangamner...	46·27	45·13	35·47	22·40
Cantonment of Ahmednagar	32·87	17·21	23·53	16·34

The registration of deaths throughout the Collectorate does not appear to be properly carried out, but the registration of births is more creditably performed.

The registration both of births and deaths in the Cantonment of Ahmednagar is much below the standard, but this may possibly to a certain extent be accounted for by no European Troops having been quartered there during a portion of the year.

Poona.

31. The Collectorate of Poona is divided into 8 rural, 2 town and 2 Cantonment circles. It contains 1,185 towns and villages and covers an area of 5,348 square miles. The population of the Collectorate is 900,621 and the average density per square mile amounts to 168·40 persons. Amongst the rural circles the recorded birth-rate in each táluka is higher than the reported death-rate. In Mával Táluka the registration of births shows a great improvement. The birth-rate (41·02 per 1,000) in it was far more than double the recorded death-rate (16·39). The birth-rate (47·35 per 1,000) in Indápur Táluka is also double the death-rate (23·79). These facts point unmistakably to defective registration of deaths. In other tálukás it is satisfactory to notice that great attention is paid to the registration of births. Amongst the urban circles the birth-rate (43·29 per 1,000) is higher than the death-rate (25·93) in the town of Junnar, but it is very unsatisfactory to notice that in the city of Poona the registration of births is much neglected. The recorded birth-rate (15·88 per 1,000) in it is considerably less than the reported death-rate (21·89). In the Cantonments of Poona and Kirkee the birth-rate nearly equals the death-rate. In the former a rate of 22·50 per 1,000 was recorded for births and a rate of 22·63 for deaths, and in the latter 13·10 and 13·79.

The total number of deaths from all causes in 1884 was 21,332, the death-rate being 23·68 against 28·60 per 1,000 in 1883 and a decennial mean of 22·62.

The maximum monthly mortality (2,438) took place in November and the minimum (1,194) in February.

Cholera commenced in July and ceased in the same month after causing only 1 death; re-appeared in October but disappeared in December. Only 11 deaths or 0·01 per 1,000 during the year were ascribed to it. Small-pox was prevalent throughout the year and caused 308 deaths or 0·34 per 1,000 against 1·36 in 1883 and a decennial mean of 0·48. The mortality from fevers was high, the death-rate per 1,000 of population being 17·53 against 16·08 in 1883 and a decennial mean of 14·96.

The following table shows the number of births and the deaths by causes and their ratios per 1,000 in each táluka, town, and Cantonment in the Collectorate, and compares the Zilla rate with that of 1883 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Poona.	Junnar Rural Circle	91,000	610·64	150·50	133	..	..	10	0·11	2,110	22·96	170	1·85	31	0·33	350	3·81	2,671	29·06	3,934	42·81
	Indápur ,,	48,114	567·	84·86	86	..	..	20	0·42	911	18·93	169	3·51	23	0·48	22	0·45	1,145	23·79	2,278	47·35
	Khed ,,	141,990	883·	159·79	244	..	..	21	0·15	2,481	17·48	246	1·73	51	0·36	392	2·77	3,161	22·28	5,134	36·18
	Sirur ,,	72,793	577·	126·16	76	..	..	6	0·08	1,604	20·66	134	1·84	29	0·40	133	1·83	1,806	24·81	2,383	32·74
	Purandhar ,,	75,678	470·	161·02	92	3	0·04	33	0·44	1,729	22·85	120	1·59	31	0·40	147	1·94	2,063	27·26	3,184	42·07
	Bhimthadi ,,	110,428	10·87	106·49	129	..	..	115	1·04	2,025	18·34	235	2·13	33	0·29	184	1·67	2,592	23·47	4,072	36·87
	Háveli ,,	150,059	799·23	187·76	237	3	0·02	76	0·51	2,769	18·45	375	2·50	66	0·44	356	2·33	3,639	24·25	4,393	29·28
	Mával ,,	62,383	385·	162·03	164	..	..	11	0·18	739	11·84	90	1·44	17	0·27	166	2·66	1,023	16·39	2,559	41·02
	Poona City Town Circle.	99,622	5·	19,924·40	1	4	0·04	15	0·15	1,015	10·19	174	1·75	62	0·62	911	9·14	2,181	21·89	1,582	15·88
	Junnar Town Circle	10,373	0·36	28,813·29	1	..	..	..	..	104	10·03	24	2·31	2	0·19	139	13·40	269	25·93	449	43·29
	Poona Cantonment.	30,129	4·55	6,621·76	1	1	0·03	1	0·03	360	11·95	44	1·46	7	0·23	269	8·93	682	22·63	678	22·50
	Kirkee ,,	7,252	4·22	1,718·48	1	..	..	..	..	39	5·38	13	1·79	1	0·14	47	6·48	100	13·79	96	13·10
	1884 ..	900,621	5,348·	168·40	1,185	11	0·01	308	0·34	15,786	17·53	1,764	1·96	353	0·39	3,110	3·45	21,332	23·68	30,741	34·13
	1883 ..					5,279	5·86	1,225	1·36	14,480	16·08	1,625	1·80	291	·32	2,383	3·18	25,763	28·60	25,705	28·54
	Mean for 10 years, 1874—1883 ..					2,011	2·22	431	·48	13,544	14·96	1,538	1·69	304	·64	2,653	2·93	20,481	22·62	19,300	21·32

The highest mortality from all causes amongst the rural circles is found in Junnar Táluka, in which the death-rate was 29·06 per 1,000 of population. No death was reported from cholera in this táluka, but 10 deaths took place from small-pox, the rate being 0·11 per 1,000. The death-rate (22·96 per 1,000) from fevers is the highest in the Collectorate. From bowel-complaints the rate was 1·85 per 1,000 and from injuries 0·33. The death-rate from other causes (3·81 per 1,000) was the highest among the rural circles.

The next highest death-rate (27·26 per 1,000) took place in Purandhar Táluka, where only 3 deaths from cholera were recorded during the year, the death-rate being 0·04 per 1,000. Small-pox caused 33 deaths or 0·44 per 1,000, whilst the death-rate (22·85) from fevers was the next highest in the Collectorate. The rate from bowel-complaints was 1·59 per 1,000 and from injuries 0·40. From other causes the rate was 1·94.

The highest death-rate from bowel-complaints (3·51 per 1,000) in the Collectorate in Indápur Táluka is probably due to an impure water-supply.

The highest death-rate from small-pox (1·04) in the Collectorate took place in Bhimthadi Táluka.

The lowest death-rate (16·39 per 1,000) from all causes occurred in Mával Táluka, in which no death from cholera was reported, whilst the death-rate from small-pox was 0·18 per 1,000. The death-rates from fevers (11·84 per 1,000) and from bowel-complaints (1·44) were the lowest in the rural circles. From injuries and other causes the rates were respectively 0·27 and 2·66 per 1,000.

The next lowest death-rate (22·28 per 1,000) took place in Khed Táluka in which no death from cholera was reported, and the rate from small-pox was 0·15 per 1,000. The death-rate (17·48) from fevers was the next lowest in the rural circles. From bowel-complaints the rate was 1·52 per 1,000 and from injuries 0·36. The rate from other causes was 2·77 per 1,000.

Amongst the town and Cantonment circles the highest death-rate (25·93 per 1,000) of population from all causes occurred in the town of Junnar. There was no death either from cholera or small-pox, whilst the death-rate from fevers was 10·03. From bowel-complaints the death-rate was 2·31 per 1,000 and from injuries 0·19. The rate from other causes was 13·40 per 1,000.

In the city of Poona the reported death-rate from all causes was 21·89 per 1,000, which is manifestly incorrect. Four deaths were recorded from cholera and 15 from small-pox, the rate being respectively 0·04 and 0·15 per 1,000. From fevers the rate was 10·19 and from bowel-complaints 1·75 per 1,000. The death-rates from injuries and other causes were respectively 0·62 and 9·14 per 1,000.

Amongst the Cantonments 1 death from cholera was reported in the Cantonment of Poona but none in Kirkee. A death-rate of 0·03 per 1,000 from small-pox, 11·95 from fevers, 1·46 from bowel-complaints, 8·93 from other causes and 22·63 from all causes took place in the Cantonment of Poona; and 5·38 from fevers, 1·79 from bowel-complaints, 6·48 from other causes and 13·79 from all causes in Kirkee. The reported death-rates from fevers and all causes in the Cantonment of Kirkee are the lowest in the Collectorate.

The high death-rate from other causes in the city of Poona, town of Junnar and Cantonments of Poona and Kirkee shows that the causes of deaths were not properly recorded under their respective heads.

The recorded birth and death rates in these towns and Cantonments in 1884 as compared with 1883 were as follows:—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
City of Poona	19·54	15·88	27·61	21·89
Town of Junnar	32·87	43·29	29·89	25·93
Cantonment of Poona	6·87	22·50	18·29	22·63
Do. of Kirkee	15·72	13·10	16·55	13·79

The low birth-rate in Poona has been noticed before, but the death-rate is also in my opinion inaccurate. The registration of births in the tálukás is more carefully carried out than that of deaths, but greater attention must be paid to the subject before we can hope that it will be even approximately correct.

Sholápur.

32. The Collectorate of Sholápur comprises 7 rural and 3 town circles. It contains 712 towns and villages and covers an area of 4,521 square miles. The population of the Collectorate is 582,487 and the average density per square mile amounts to 128·84 persons. Amongst the rural registration circles the birth-rate in each táluka is higher than the death-rate. In Sholápur Táluka the birth-rate (38·36 per 1,000) was more than double the death-rate (17·42). Amongst the urban registration circles the birth-rate in each town was lower than the death-rate. This is particularly noticed in the town of Sholápur where it was far below the death-rate as the recorded birth-rate in this town was 19·49 per 1,000, whilst the death-rate was 34·38. This shows that very little attention is paid by the Municipality of this town to the registration of births even if the deaths are correctly registered. In the town of Pandharpur the birth-rate (47·31) and the death-rate (48·02) are nearly the same. In the town of Bársi the registration of births is neglected as the birth-rate was 26·78 per 1,000 whilst the death-rate was 39·31.

The recorded number of deaths from all causes in 1884 amounted to 14,589, the death-rate being 25·04 per 1,000 of population against 29·11 in 1883 and a decennial mean of 26·96.

The maximum monthly mortality (1,525) took place in October and the minimum (961) in February.

Cholera commenced in October and continued till December; 31 deaths or 0·05 per 1,000 were ascribed to it. Small-pox prevailed throughout the year to a great extent and caused 364 deaths against 55 in 1883, the death-rate being 0·62 per 1,000 against 0·09 in 1883 and a decennial mean of 0·20. The death-rate from fevers was the same as it was in 1883, 18·70 per 1,000 against 18·71 in 1883 and a decennial mean of 15·83.

The following table shows the number of births and the deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate and compares the Zilla rate with that of 1883 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Sholápur.	Sholápur Rural Circle	59,649	845·67	108·01	146	7	·08	20	·22	1,219	13·60	149	1·66	24	·27	143	1·59	1,562	17·42	3,439	38·35
	Bársi ,, ..	93,920	595·62	157·68	122	..	..	92	·98	1,553	16·64	135	1·44	29	·31	195	2·09	2,015	21·46	3,817	40·64
	Mádha ,, ..	67,961	619	109·79	89	2	·03	5	·07	1,236	18·19	223	3·28	20	·29	127	1·87	1,613	23·73	2,975	43·77
	Karmála ,, ..	61,548	769	80·85	123	..	..	14	·23	1,384	22·49	104	1·69	20	·32	127	2·06	1,649	26·79	3,053	49·76
	Pandharpur ,, ..	55,302	469·49	117·79	84	7	·13	6	·11	1,027	18·57	109	1·97	4	·07	164	2·96	1,317	23·81	2,356	42·60
	Sángola ,, ..	62,849	649	96·84	76	12	·19	44	·70	1,130	17·98	74	1·18	11	·17	293	4·65	1,653	24·87	2,860	45·51
	Málsiras ,, ..	58,232	574	101·62	69	1	·02	27	·46	1,198	20·54	51	·87	12	·21	76	1·30	1,365	23·40	2,314	39·67
	Sholápur Town Circle	59,890	1·33	45,030·07	1	..	..	136	2·27	1,309	21·85	100	1·67	10	·17	504	8·42	2,059	34·38	1,167	19·49
	Bársi ,, ..	16,126	0·38	42,436·84	1	..	..	20	1·24	338	20·96	43	2·67	11	0·68	222	13·76	634	39·31	432	26·78
	Pandharpur ,, ..	16,910	0·51	33,156·86	1	2	·12	..	..	483	28·86	209	12·36	7	·41	106	6·27	812	48·02	800	47·31
	1884 ..	582,487	4,621	126·34	712	31	0·05	364	0·62	10,892	18·70	1,197	2·06	148	0·25	1,957	3·36	14,589	25·04	23,223	39·87
	1883 ..					2,544	4·37	55	.09	10,897	18·71	1,327	2·28	189	·32	1,946	3·34	16,958	29·11	20,634	35·42
	Mean for 10 years, 1874—1883 ..					1,455	2·15	134	·20	10,724	15·83	1,723	2·54	215	·32	4,014	5·92	18,265	26·96	13,565	20·02

Amongst the rural circles the highest death-rate from all causes (26·79 per 1,000) took place in Karmála Táluka in which no death from cholera was reported. There were 14 deaths from small-pox, the rate being 0·23 per 1,000, whilst the death-rate from fevers was 22·49 per 1,000, which is the highest in the rural circles. From bowel-complaints the death-rate was 1·69 per 1,000 and from injuries 0·32. The death-rate from other causes was 2·06 per 1,000.

The next highest death-rate (24·87 per 1,000) occurred in Sángola Táluka in which 12 deaths were recorded from cholera, the death-rate being 0·19 per 1,000. The death-rate from small-pox was 0·70 and from fevers 17·98 per 1,000. From bowel-complaints and injuries the death-rates were respectively 1·18 and 0·17 per 1,000. The death-rate from other causes (4·65 per 1,000) was the highest among the rural circles. Amongst the rural circles a high death-rate from bowel-complaints (3·28 per 1,000) is recorded to have taken place in Mádha Táluka.

The lowest death-rate (17·42 per 1,000) is found in Sholápur Táluka and this is also the lowest in the Collectorate. There were 7 deaths from cholera and 20 from small-pox, the death-rate being respectively 0·08 and 0·22 per 1,000. The death-rate (13·60 per 1,000), from fevers is the lowest in the Collectorate. From bowel-complaints and injuries the death-rates were respectively 1·66 and 0·27 per 1,000 and from other causes 1·59.

The next lowest death-rate (21·46 per 1,000) occurred in Bársi Táluka in which no death was reported from cholera. Small-pox caused 92 deaths, the rate being 0·98 per 1,000. From fevers the death-rate was 16·64 and from bowel-complaints 1·44 per 1,000. The death-rate from injuries was 0·31 per 1,000 and from other causes 2·09.

Amongst the urban circles an enormously high death-rate from all causes (48·02 per 1,000 of population) was recorded in the town of Pandharpur; cholera caused only 2 deaths. There were no deaths from small-pox, whilst the death-rate from fevers (28·86 per 1,000) was the highest in the Collectorate. The enormously high death-rate (12·36 per 1,000) from bowel-complaints is probably due to an impure water-supply. The death-rate from injuries was 0·41 per 1,000 and from other causes 6·27.

The next highest death-rate (39·31 per 1,000) took place in the town of Bársi in which no death from cholera was reported. The death-rate from small-pox was 1·24 whilst that of fevers 20·96 per 1,000. The death-rate from bowel-complaints was 2·67 and from injuries 0·68 per 1,000. The death-rate (13·76) from other causes is the highest in the Collectorate.

In the town of Sholápur the death-rate from all causes (34·38 per 1,000) was the lowest in the town circles. No death was ascribed to cholera, whilst the death-rate (2·27 per 1,000) from small-pox was the highest in the Collectorate. The rate from fevers was 21·85 and from bowel-complaints 1·67 per 1,000. From injuries and other causes the death-rates were respectively 0·17 and 8·42 per 1,000.

The recorded birth and death rates in these towns in 1884 as compared with 1883 were as follows :—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Sholápur	25·46	19·49	35·77	34·38
Do. Bársi	24·37	26·78	40·93	39·31
Do. Pandharpur	53·99	47·31	64·58	48·02

It is evident that in the town of Sholápur the registration of births is much neglected and at Bársi it cannot be accepted as correct. In other parts of the Collectorate it is very fairly carried out but the registration of deaths in many of the tálukás is evidently much neglected.

Sátára.

33. The Collectorate of Sátára is divided into 12 rural and 3 town circles and contains 1,343 towns and villages. It covers an area of 4,988 square miles. The population of the Collectorate is 1,062,350, and the average density per square mile amounts to 212·98 persons. In 1884 the birth-rate in each táluka and town is higher than the death-rate. In Mán Táluka the recorded birth-rate, 58·37 per 1,000, is double the recorded death-rate, 29·03. In the towns of Sátára and Karád the birth-rates (27·76 and 28·21 respectively) are slightly higher than the death-rates (25·73 and 25·24).

The number of deaths from all causes in 1884 amounted to 28,271, the death-rate being 26·61 per 1,000 of population against 23·15 in 1883 and a decennial mean of 25·80.

The maximum monthly mortality (3,019) took place in September and the minimum (1,702) in February.

Cholera commenced in April and disappeared in June but re-appeared in August; attained its maximum intensity in September and disappeared in December; 99 deaths or 0·09 per 1,000 were ascribed to it. Small-pox prevailed

throughout the year to a great extent and caused 1,217 deaths against 385 in 1883, the death-rate being 1·15 per 1,000 against 0·36 in 1883 and a decennial mean of 0·16. The death-rate from fevers was very high, 20·11 per 1,000 against 16·93 in 1883 and a decennial mean of 17·95.

The following table shows the number of births and the deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate and compares the Zilla rate with that of 1883 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Sátára	Sátára Rural Circle.	90,885	335·18	271·15	147	3	·03	144	1·58	2,289	25·19	75	·82	36	·40	187	2·06	2,734	30·08	4,038	44·43
	Jávli „ ..	60,481	419·	144·35	252	..	..	19	·31	961	15·89	28	·47	19	·31	103	1·70	1,130	18·68	2,025	33·48
	Wái „ ..	76,934	390·	197·27	124	60	·78	74	·96	1,863	24·22	110	1·43	24	·31	207	2·69	2,338	30·39	3,287	42·72
	Karád „ ..	130,142	394·63	329·78	103	..	..	95	·73	2,581	19·83	352	2·70	48	·37	458	3·52	3,534	27·15	5,889	45·25
	Válva „ ..	169,408	543·	311·99	136	23	·14	86	·51	2,702	15·95	460	2·72	63	·37	434	2·56	3,768	22·25	6,135	36·21
	Tásgaon „ ..	79,704	341·	233·74	49	8	·10	150	1·88	1,133	14·22	307	3·85	25	·31	477	5·98	2,100	26·34	3,825	47·99
	Khánápur „ ..	80,227	531·	151·27	91	..	..	181	2·25	1,778	22·13	115	1·43	29	.36	218	2·71	2,321	28·89	3,895	48·49
	Khatáv „ ..	74,027	497·	148·95	84	3	·04	121	1·63	1,869	25·25	52	·70	22	·30	171	2·31	2,238	30·23	3,919	52·94
	Mán „ ..	52,111	649·	80·29	78	2	·04	59	1·13	1,170	22·45	19	·36	14	·27	249	4·78	1,513	29·03	3,042	58·37
	Málcolmpeit „ ..	3,248	..	..	..	..	..	..	..	86	26·48	4	1·23	2	·61	19	5·85	111	34·17	158	48·64
	Koregaon „ ..	81,187	349·	232·63	74	..	..	36	·44	2,037	25·09	117	1·44	22	·27	151	1·86	2,363	29·10	3,567	43·93
	Pátan „ ..	112,414	536·	209·73	202	..	..	173	1·54	2,143	19·06	129	1·12	31	·28	258	2·29	2,731	24·29	4,145	36·87
	Sátára Town Circle.	29,023	0·82	35,400·	1	..	..	39	1·34	391	13·47	157	5·41	10	·34	150	5·17	747	25·73	806	27·76
	Wái „ ..	11,676	2·	5,838·	1	..	..	17	1·46	231	19·78	37	3·17	2	·17	84	7·19	371	31·77	449	38·45
	Karád „ ..	10,778	0·37	29,129·73	1	..	..	23	2·13	135	12·53	57	5·29	2	·19	55	5·10	272	25·24	304	28·21
	1884 ..	1,062,350	4,988	212·98	1,343	99	·09	1,217	1·15	21,369	20·11	2,016	1·90	349	·33	3,221	3·03	28,271	26·61	45,454	42·81
	1883 ..					1,209	1·14	385	·36	17,980	16·93	1,960	1·84	359	·34	2,698	2·54	24,591	23·15	40,737	38·35
	Mean for 10 years, 1874—1883 ..					2,218	2·09	169	·16	19,051	17·95	2,750	1·62	397	·20	2,819	3·76	27,384	25·80	30,146	29·25

N.B.—The area in square miles of Malcolmpeit is included in Jávli Táluka as in the Census Report.

Amongst the rural circles the highest death-rate from all causes (34·17 per 1,000) took place in Malcolmpeit Táluka in which no deaths either from cholera or from small-pox were reported. The death-rate (26·48 per 1,000) from fevers was the highest in the Collectorate. The death-rate from bowel-complaints was 1·23 per 1,000 and from injuries 0·61. From other causes the rate was 5·85.

The next highest death-rate (30·39 per 1,000) from all causes, which is nearly the same as that of tálukás Khatáv (30·23) and Sátára (30·08), took place in Wái Táluka in which sixty deaths from cholera were reported; the death-rate, 0·78 per 1,000, was the highest in the Collectorate. Small-pox caused 74 deaths, the death-rate being 0·96, whilst the death-rate from fevers was 24·22 per 1,000. From bowel-complaints the death-rate was 1·43 per 1,000 and from injuries 0·31. The death-rate from other causes was 2·69 per 1·000.

The death-rate from fevers in Khatáv and Sátára tálukas were respectively 25·25 and 25·19 per 1,000.

The lowest death-rate (18·68 per 1,000) from all causes is found in Jávli Táluka, in which no death from cholera was reported, but small-pox caused 19 deaths or 0·31 per 1,000, which is the lowest in the Collectorate. The death-rate from fevers was 15·89 per 1,000 and from bowel-complaints 0·47. The rates from injuries and other causes were respectively 0·31 and 1·70 per 1,000.

The next lowest death-rate (22·25 per 1,000) occurred in Válva Táluka in which cholera carried off 23 persons or ·014 per 1,000. Small-pox caused 86

deaths, the death-rate being 0·51 per 1,000, whilst the death-rate from fevers was 15·95. From bowel-complaints the death-rate was 2·72 and from injuries 0·37. The rate from other causes was 2·56.

Amongst the urban circles the highest death-rate (31·77 per 1,000) from all causes occurred in the town of Wái in which no death from cholera was reported. 17 deaths were recorded from small-pox, the death-rate being 1·46 per 1,000, whilst the rate from fevers was 19·78. The death-rate (3·17) from bowel-complaints in this town is a high one. From injuries the rate was 0·17 and from other causes 7·19 per 1,000 which is the highest in the Collectorate.

The lowest death-rate (25·24 per 1,000), which was nearly the same as that of the town of Sátára (25·73) was reported from the town of Karád, in which no death was reported from cholera. Small-pox caused 23 deaths or 2·13 per 1,000. The death-rate (12·53) from fevers was the lowest in the Collectorate. The death-rate from bowel-complaints was 5·29 per 1,000 and from injuries 0·19. From other causes the rate was 5·10.

In the town of Sátára the death-rate from fevers was 13·47, whilst the death-rate (5·41) from bowel-complaints was the highest in the Collectorate and was probably due to the impure water-supply.

The recorded birth and death rates in these towns in 1884 as compared with 1883 were as follows :—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Sátára	27·66	27·76	24·28	25·73
Do. Wái	12·68	38·45	21·49	31·77
Do. Karád	26·54	28·21	27·28	25·24

The registration both of births and deaths is neglected in the towns of Sátára and Karád, but at Wái it appears to be much more carefully attended to.

The registration of births is generally very satisfactorily performed throughout the Collectorate as is the registration of deaths in many of the tálukás. It is satisfactory to notice the improvement that has taken place in this respect since 1883.

Ratnágiri.

34. The Collectorate of Ratnágiri is divided into 8 tálukas and 2 towns. It contains 1,297 towns and villages and covers an area of 3,922 square miles. The population of the Collectorate is 997,090 and the average density per square mile amounts to 254·22 persons. With the exception of the town of Vengurla the birth-rate in each táluka and town was higher than the death-rate. In the town of Vengurla the birth-rate (25·48 per 1,000) was much below the death-rate (35·76)—a fact which should attract the attention of the Municipality of that town.

The total number of deaths from all causes in 1884 was 15,798, the death-rate being 15·84 per 1,000 against 16·88 in 1883 and a decennial mean of 17·27.

The maximum monthly mortality (1,696) took place in January and the minimum (1,109) in September.

Cholera commenced in January, attained its maximum intensity in July, and continued to prevail until December; 144 deaths were ascribed to it, the death-rate being 0·14 per 1,000 against 0·09 in 1883. Small-pox prevailed throughout the year to a great extent and caused 1,171 deaths or 1·17 per 1,000 against 0·99 in 1883 and a decennial mean of 0·40. The death-rate from fevers (8·06 per 1,000) was a little below the mean of 10 years (9·58) and slightly below the rate in 1883 (8·42).

The following statement shows the number of births and the deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the Zilla rate with that of 1883 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Ratnágiri.	Málvan Rural Circle.	109,953	431·96	254·54	67	2	·02	164	1·49	338	3·62	137	1·25	39	·35	941	8·56	1,681	15·29	2,293	20·85
	Devgad ,, ..	117,899	543·	217·13	121	..	..	34	·71	614	5·21	103	·87	61	·52	946	8·02	1,808	15·33	2,643	22·41
	Rájápur ,, ..	127,999	512·	250·00	174	..	..	69	·54	934	7·29	239	1·87	58	·45	395	3·09	1,695	13·24	2,848	22·21
	Ratnágiri ,, ..	113,611	302·97	374·99	149	..	..	183	1·61	994	8·75	130	1·14	48	·42	515	4·53	1,870	16·46	2,711	23·86
	Sangameshvar ,, ..	104,640	557·	187·86	179	20	·19	176	1·68	816	7·79	109	1·04	34	·33	390	3·73	1,545	14·76	1,876	17·93
	Chiplún ,, ..	168,921	670·	252·12	212	26	·15	118	·70	1,494	8·84	139	·82	50	·30	721	4·33	2,558	15·14	3,082	18·25
	Khed ,, ..	91,492	400·	228·73	146	..	..	40	·44	1,090	11·91	51	·56	27	·29	347	3·79	1,555	16·99	1,848	20·20
	Dápoli ,, ..	141,012	505·	279·23	247	84	·59	204	1·45	1,548	10·98	116	·82	33	·23	514	3·65	2,499	17·72	2,704	19·18
	Vengurla Town Circle.	8,947	0·03	2,98,233·	1	12	1·34	99	11·06	36	4·02	4	·45	2	·22	167	18·67	320	35·76	228	25·48
	Ratnágiri ,, ..	12,616	0·04	3,15,400·	1	..	..	34	2·69	112	8·88	6	·47	1	·08	114	9·04	267	21·16	371	29·04
	1884 ..	997,090	3,922	254·22	1,297	144	·14	1,171	1·17	8,038	8·06	1,034	1·04	353	·35	5,060	5·08	15,798	15·84	20,599	20·66
	1883 ..					91	·09	291	·29	8,398	8·42	670	·67	400	·40	6,281	6·30	16,831	16·88	19,976	20·03
	Mean for 10 years, 1874—1883 ..					549	·54	404	·40	9,695	9·58	1,470	1·45	413	·41	4,956	4·89	17,487	17·27	16,032	15·83

Amongst the rural circles the highest death-rate (17·72 per 1,000) from all causes took place in Dápoli Táluka, in which cholera carried off 84 persons or 0·59 per 1,000. Small-pox caused 204 deaths or 1·45 per 1,000, whilst the death-rate from fevers was 10·98 per 1,000. The death-rate from bowel-complaints was 0·82 and from injuries 0·23 per 1,000. From other causes the rate was 3·65.

The highest death-rate (11·91 per 1,000) from fevers in the Collectorate was recorded in Khed Táluka.

The lowest death-rate (13·24 per 1,000) occurred in Rájápur Táluka, in which no death from cholera was reported. From small-pox the death-rate was 0·54 per 1,000 whilst that from fevers 7·29. The death-rate (1·87 per 1,000) from bowel-complaints was the highest in the Collectorate. The death-rate from injuries was 0·45 and from other causes 3·09 per 1,000, which was the lowest in the Collectorate.

Amongst the urban circles the highest death-rate from all causes (35·76 per 1,000) was found in the town of Vengurla, which is also the highest in the Collectorate. There were 12 deaths from cholera, the death-rate (1·34 per 1,000) was the highest in the Collectorate. The death-rate (11·06 per 1,000) from small-pox was very high and it is also the highest in the Collectorate, whilst the death-rate from fevers was 4·02. The death-rate from bowel-complaints (0·45 per 1,000) was the lowest in the Collectorate, whilst the death-rate (18·67) from other causes was the highest in the Collectorate.

In the town of Ratnágiri the death-rate from all causes (21·16 per 1,000) was the next highest in the Collectorate. No death from cholera was recorded, the rate of small-pox being 2·69 whilst that of fevers was 8·88. From bowel-complaints and other causes the death-rates respectively were 0·47 and 9·04 per 1,000.

SKELETON MAP

SOUTHERN REGISTRATION DISTRICT

BOMBAY PRESIDENCY

Scale. 40 Miles to 1 Inch.

The recorded birth and death rates in these towns in 1884 as compared with 1883 were as follows :—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Vengurla	27·05	25·48	26·83	35·76
Do. Ratnágiri	26·79	29·04	24·73	21·16

The registration of births both in Vengurla and Ratnágiri is not accurate and that of deaths in the last-named town is also incorrect.

The registration of vital statistics in the tálukás also is much neglected, and I would hope that Government will be pleased to order more attention being paid to this matter in this Collectorate.

SOUTHERN REGISTRATION DISTRICT.

COLLECTORATES.

1 Belgaum. | 3 Kaládgi.
2 Dhárwár. | 4 Kánara.

Belgaum.

35 The Collectorate of Belgaum is divided into 7 tálukás (rural circles), 3 towns (urban circles) and 1 Cantonment. It contains 1,077 towns and villages and covers an area of 4,657 square miles. The population of the Collectorate is 864,014 and the average density per square mile amounts to 185·53 persons. The birth-rate in each táluka and town, except the town of Belgaum and its Cantonment, was higher than the death-rate. The birth-rate in Athni Táluka (47·29) was considerably higher than the death-rate (29·35); but the birth-rate in Gokák and Parasgad tálukás was also much higher than the death-rate. In the former the birth-rate was 50·37, the death-rate being 35·32 per 1,000 and in the latter 42·82 and 28·79 respectively. The tálukás of Belgaum and Chikodi show an improvement in the registration of births; but in the tálukás of Sampgaon and Khánápur more attention is still required to be given to this subject. It is satisfactory to notice that great attention is paid in the towns of Gokák and Athni to the registration of births. In Gokák the birth-rate was 43·37, whilst the death-rate in it amounted to 30·46 per 1,000. In Athni the birth-rate was 42·73 and the death-rate 27·09. The birth-rate (23·02) in the town of Belgaum was lower than the death-rate (28·86), and in the Cantonment of Belgaum the rates are respectively 13·25 and 16·49, showing that the registration of vital statistics in it is much neglected.

The total number of deaths from all causes in 1884 amounted to 27,993, the death-rate per 1,000 being 32·40 against 22·23 in 1883 and a decennial mean of 33·24.

The maximum monthly mortality (3,585) took place in August and the minimum (1,842) in February.

Cholera though present in January disappeared in that month, but reappeared in June, attained its maximum intensity in August, and continued to be prevalent till the close of the year. 2,701 deaths were ascribed to it. Small-pox prevailed throughout the year to a great extent and caused 2,486 deaths against 440 in 1883. The death-rate was 2·87 against 0·52 per 1,000 in 1883, the mean of 10 years being 0.41. The death-rate for fevers (14·05) was below the decennial mean (16·64), but above the rate in 1883 (11·07).

The following table shows the number of births and the deaths by causes and their ratios per 1,000 in each táluka, town and Cantonment in the Collectorate and compares the Zilla rate with that of 1883 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Belgaum.	Belgaum Rural Circle	95,780	661·55	144·78	190	100	1·04	689	6·15	1,575	16·44	513	5·36	22	0·24	321	3·35	3,120	32·58	3,659	38·20
	Sampgaon "	119,843	425	281·98	123	521	4·35	682	5·69	2,355	19·65	562	4·69	41	0·34	504	4·21	4,665	38·93	4,725	39·43
	Khánápur "	79,294	632	125·42	219	176	2·22	181	2·28	1,523	19·22	335	4·22	26	0·33	375	4·73	2,616	33·00	2,807	35·41
	Chikodi "	245,614	840	292·40	213	1,047	4·26	433	1·76	2,656	10·81	1,407	5·73	76	0·32	2,175	8·86	7,802	31·76	9,783	39·83
	Parasgad "	91,826	640	143·48	127	235	2·56	153	1·66	1,180	12·85	490	5·34	24	0·26	562	6·12	2,644	28·79	3,923	42·72
	Gokák "	82,722	670·61	123·35	113	299	3·61	175	2·11	1,295	15·66	385	4·65	27	0·33	741	8·95	2,922	35·32	4,167	50·37
	Athni "	94,775	786·08	120·57	80	242	2·55	84	0·89	1,087	11·47	751	7·92	40	0·42	578	6·10	2,782	29·35	4,482	47·29
	Belgaum Town Circle	29,115	0·45	51,366·67	1	22	0·95	141	6·10	204	8·83	39	1·69	19	0·82	242	10·47	667	28·86	632	23·02
	Gokák "	10,307	0·39	26,428·21	1	44	4·27	17	1·65	93	9·02	72	6·99	2	0·19	86	8·34	314	30·46	447	43·37
	Athni "	11,186	0·92	12,163·70	1	5	0·45	17	1·52	108	9·66	108	9·66	9	0·80	56	5·00	303	27·09	478	42·73
	Belgaum Cantonment	9,582	..	..	..	10	1·04	9	0·94	62	6·47	27	2·22	4	0·42	46	4·80	158	16·49	127	13·25
	1884 ..	864,014	4,657	185·53	1,077	2,701	3·13	2,486	2·87	12,138	14·05	4,689	5·43	293	0·34	5,686	6·58	27,993	32·40	35,[illegible]	[illegible]
	1883 ..					479	·55	440	0·52	9,565	11·07	3,919	4·53	271	·31	4,534	5·25	19,208	22·23	35,078	40·60
	Mean for 10 years, 1874—1883 ..					2,396	2·61	374	·41	15,249	16·64	3,084	3·36	362	·39	9,009	9·83	30,474	33·24	25,885	28·24

N. B.—The area of the Cantonment of Belgaum is included in the town of Belgaum as it is not separately shown in the Census Report.

Amongst the rural circles the highest death-rate from all causes (38·93 per 1,000), which was also the highest in the Collectorate, took place in Sampgaon Táluka in which cholera carried off 521 persons. The death-rate, 4·35 per 1,000 of population, was the highest in the Collectorate. Small-pox caused 682 deaths or 5·69 per 1,000, whilst the death-rate (19·65) from fevers was the highest in the Collectorate. The death-rate from bowel-complaints was 4·69 and from injuries 0·34. From other causes the rate was 4·21 per 1,000.

The lowest recorded death-rate (28·79 per 1,000) from all causes took place in Parasgad Táluka where cholera caused 235 deaths or 2·56 per 1,000. From small-pox there were 153 deaths, the death-rate being 1·66. The death-rate from fevers was 12·85, whilst the rate from bowel-complaints was 5·34 per 1,000. From injuries the rate was 0·26 and from other causes 6·12.

Amongst the town circles the highest death-rate from all causes (30·46) occurred in the town of Gokák in which 44 deaths were returned from cholera, the death-rate being 4·27 per 1,000. From small-pox there were 17 deaths or 1·65 per 1,000, whilst the death-rate from fevers was 9·02. The rate from bowel-complaints was 6·99 and from injuries 0·19. From other causes the death-rate was 8·34 per 1,000.

The lowest death-rate (27·09) from all causes took place in the town of Athni, in which only 5 deaths occurred from cholera. The death-rate, 0·45, was the lowest in the Collectorate. Small-pox caused 17 deaths or 1·52 per 1,000, whilst the death-rate (9·66) from fevers was the highest in the town circles. From bowel-complaints the death-rate (9·66) was very high and is the highest in the Collectorate. The rates from injuries and other causes were respectively 0·80 and 5·00 per 1,000.

In the town of Belgaum the death-rate from all causes was 28·86 per 1,000. There were 22 deaths from cholera and 141 from small-pox, the death-rates being respectively 0·95 and 6·10. From fevers the rate was 8·83 and from bowel-complaints 1·69. The death-rate from injuries was 0·82, whilst the rate, 10·47, from other causes, was the highest in the Collectorate. In the Cantonment of Belgaum a death-rate of only 16·49 per 1,000 was recorded out of a population of 9,582, 10 of which were ascribed to cholera and 9 to small-pox, the respective rates being 1·04 and 0·94. No credit can be attached to the recorded death-rate, 16·49, which however shows some improvement over the results of 1883.

The recorded birth and death rates in these towns and Cantonment in 1884 as compared with 1883 were as follows:—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Belgaum	18·08	23·02	20·55	28·86
Do. Gokák...	38·91	43·37	22·51	30·46
Do. Athni	29·24	42·73	32·99	27·09
Cantonment of Belgaum	9·18	13·25	9·18	16·49

The registration of vital statistics in Belgaum Collectorate is very fairly carried out and show a great improvement over last year.

The registration of births, with the exception of the Town and Cantonment of Belgaum, is particularly good.

Dhárwár.

36. The Collectorate of Dhárwár is divided into 11 tálukás and 3 pethás forming 14 rural circles and 4 town circles. It contains 1,285 towns and villages and covers an area of 4,535 square miles. The population of the Collectorate is 882,907 and the average density per square mile amounts to 194·68 persons. Amongst the rural circles the recorded birth-rate in each táluka is higher than the death-rate. In Ránebennur and Kod tálukás the birth-rate is considerably higher than the death-rate, as in the former it was 48·38, the death rate being 32·96 per 1,000, and in the latter these rates were respectively 43·49 and 28·10. Amongst the urban circles the birth-rates in the towns of Gadag Betgeri (49·29) and Ránebennur (50·68) are higher than the death-rates (38·99) and (28·52) respectively. The towns of Dhárwár and Hubli record lower birth-rates, (27·95) and (35·01) respectively than the death-rates, 29·46 and 38 99. Such results point to defective registration of births in these towns.

The total number of deaths from all causes in 1884 amounted to 30,170. The death-rate per 1,000 of population was 34·17 against 21·74 in 1883 and a decennial mean of 33·01.

The maximum monthly mortality (4,003) took place in July and the minimum (1,982) in February and April.

Cholera commenced in March, attained its maximum intensity in July, and continued till December, 4,655 deaths being ascribed to it; the death-rate being 5·27 per 1,000 against 0·03 in 1883 and a decennial mean of 2·10. Small-pox prevailed throughout the year to a great extent and caused 2,543 or 2·88 per 1,000 deaths against 493 or 0 56 per 1,000 in 1883. The mean rate of previous 10 years was 0·46. The death-rate (14·42 per 1,000) for fevers was much below the decennial mean of the previous 10 years (18·59).

The following statement shows the number of births and the deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the Zilla rate with that of 1883 and the mean of the previous 10 years:—

Collectorate.	Registration Circles	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Dhárwár.	Dhárwár Rural Circle..	83,945	423·85	198·06	127	398	4·74	76	0·91	1,322	15·75	395	4·71	22	0·26	735	8·75	2,948	35·12	3,616	43·08
	Mugad Petha " ..	55,320	309·82	178·56	70	532	9·62	206	3·72	841	15·20	381	6·89	11	0·20	292	5·28	2,263	40·91	2,635	47·63
	Hubli " ..																				
	Navalgund " ..	87,832	562·	156·28	89	581	6·62	240	2·73	1,134	12·91	443	5·04	9	0·10	773	8·80	3,180	36·20	4,224	48·09
	Natgund Petha " ..																				
	Gadag " ..	83,332	698·72	119·16	99	576	6·91	428	5·14	1,067	12·80	509	6·11	26	0·31	503	6·04	3,109	37·31	4,095	49·14
	Mundargi Petha " ..																				
	Kalghatgi " ..	50,769	279·	181·97	105	136	2·68	93	1·83	947	18·65	285	5·61	11	0·22	230	4·53	1,702	33·52	2,036	40·10
	Bankápur " ..	76,564	343·	223·19	142	315	4·12	67	0·87	1,149	15·01	554	7·25	17	0·22	173	2·26	2,276	29·73	3,149	41·13
	Ron " ..	60,124	370·	164·12	59	239	4·26	734	12·09	765	12·60	460	7·57	15	0·25	157	2·59	2,390	39·36	2,688	44·27
	Karajgi " ..	83,216	442·	188·27	130	627	7·53	140	1·68	1,178	14·16	321	3·86	19	0·23	400	4·81	2,685	32·27	3,528	42·40
	Hángal " ..	65,787	299·	220·02	162	255	3·88	74	1·12	1,176	17·88	296	4·50	25	0·38	238	3·62	2,064	31·38	2,381	36·20
	Ránebennur " ..	64,011	404·63	158·20	121	158	2·47	99	1·55	1,073	16·76	409	6·39	22	0·34	249	3·89	2,110	32·96	3,097	48·38
	Kod " ..	80,345	400·	200·89	177	71	0·88	147	1·83	1,278	15·91	356	4·43	25	0·31	381	4·74	2,258	28·10	3,4[illegible]	43·49
	Dhárwár Town Circle..	27,191	1·15	23,644·35	1	142	5·22	68	2·50	256	9·42	11	0·40	11	0·40	313	11·51	801	29·46	[illegible]	[illegible]
	Hubli " ..	36,677	1·18	31,082·20	1	466	12·71	103	2·81	292	7·96	130	3·54	14	0·38	425	11·59	1,430	38·99	1,284	35·01
	Gadag Betgeri " ..	17,001	0·28	60,717·86	1	133	7·82	48	2·82	165	9·71	130	7·65	4	0·23	183	10·76	663	38·99	838	49·28
	Ránebennur " ..	10,202	0·37	27,572·97	1	6	0·59	20	1·96	89	8·72	23	2·25	4	0·39	149	14·61	291	28·52	517	50·68
	1884 ..	862,907	4535·	194.68	1,286	4,655	5·27	2,543	2·88	12,732	14·42	4,704	5·33	235	0·27	5,301	6·00	32,170	34·17	38,842	43·43
	1883 ..					28	0·03	493	·56	10,340	11·71	3,763	4·26	288	·33	4,233	4·85	19,195	21·74	38,927	44·09
	Mean for 10 years, 1874—1883 ..					2,011	2·10	439	·46	17,789	18·59	4,617	4·83	388	·41	6,334	6·62	31,578	33·01	26,978	28·20

N B.—The births and deaths of pethás are included in their respective tálukas as the population of the pethás is not shown separately in the Census Report.

Amongst the rural circles the highest death-rate from all causes (40·91) took place in Hubli Táluka which is also the highest in the Collectorate. Cholera caused 532 deaths. The death-rate (9·62) was the highest in the rural registration circles. From small-pox there were 206 deaths, the death-rate being 3·72, whilst the rate from fevers was 15·20 per 1,000. From bowel-complaints the death-rate was 6·89 and from injuries 0·20. The death-rate from other causes was 5·28.

The lowest death-rate (28·10) occurred in Kod Táluka in which cholera caused 71 deaths or 0·88 per 1,000. From small-pox 147 deaths or 1·83 per 1,000 were returned, whilst the death-rate from fevers was 15·91 per 1,000. From bowel-complaints and injuries the rates were respectively 4·43 and 0·31. The death-rate from other causes was 4·74.

Amongst the four urban circles the highest death-rate from all causes (38·99) is reported to have been the same at the town of Gadag Betgeri and in Hubli. In the latter town cholera carried off 466 persons out of a population of 36,677, the death-rate (12·71 per 1,000) being the highest in the Collectorate. Small-pox caused 103 deaths, the death-rate being 2·81. The death-rate (7·96 per 1,000) from fevers was the lowest in the Collectorate. From bowel-complaints and injuries the rates were respectively 3·54 and 0·38 per 1,000. The death-rate from other causes was 11·59.

In Gadag Betgeri there were 133 deaths or 7·82 from cholera and 48 or 2·82 per 1,000 from small-pox. From fevers the rate was 9·71 and from bowel-complaints the death-rate (7·65) was the highest in the Collectorate.

The lowest death-rate (28·52) was in the town of Ránebennur in which cholera caused 6 deaths or 0·59 per 1,000. There were 20 deaths from small-pox, the death-rate being 1·96 per 1,000. From fevers the death-rate was 8·72 and from bowel-complaints 2·25. The death-rate (14·61) from other causes was the highest in the Collectorate.

In the town of Dhárwár the recorded death-rate from all causes was 29·46. 142 deaths or 5·22 per 1,000 were ascribed to cholera and 68 or 2·50 to small-pox. From fevers the death-rate was 9·42 per 1,000 and from bowel-complaints 0·40.

The recorded birth and death rates in these towns in 1884 as compared with 1883 were as follows :—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Dhárwár	27·21	27·95	15·63	29·46
Do. Hubli	45·45	35·01	22·27	38·99
Do. Gadag Betgiri	50·47	49·29	22·88	38·99
Do. Ránebennur	40·58	50·68	21·66	28·52

The registration of vital statistics receives great attention in the Dhárwár Collectorate. In the town of Dhárwár it is neglected and although Ránebennur has the highest birth-rate in the Presidency, the death-rate cannot be accepted as correct.

Kaládgi.

37. The Collectorate of Kaládgi comprises 8 tálukás and 1 town, and contains 1,141 towns and villages. It covers an area of 5,757 square miles. The population of the Collectorate is 638,493 and the average density per square mile amounts to 110·90 persons. The birth-rate in each táluka and in the town of Kaládgi was higher than the death-rate. In Hungund Táluka the birth-rate (43·52 per 1,000) was nearly double the death-rate (22·24), and this points to incorrectness in the registration of deaths.

The total number of deaths from all causes during 1884 amounted to 16,327, the death-rate being 25·57 per 1,000 against 21·46 in 1883 and a decennial mean of 30·19.

The maximum monthly mortality (2,104) took place in August and the minimum (1,009) in May.

Cholera was present at the end of 1883, and in 1884 it continued till March and disappeared in the same month, but re-appeared in June and attained its maximum intensity in August. It continued to prevail till December; 1,070 deaths were attributed to it, the millesimal rate being 1·68 against 1·58 in 1883. Small-pox was prevalent throughout the year to a great extent and caused 1,800 deaths, the death-rate being 2·82 per 1,000 against 1·02 in 1883 and a decennial mean of 0·28. The death-rate from fevers (13·96) was below the decennial mean (17·96) and slightly higher than the rate in 1883 (13·03).

The following statement shows the number of births and the deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the Zilla rate with that of 1883 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel Complaints. Number.	Bowel Complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Kaládgi.	Indi Rural Circle..	71,940	871·	82·59	121	44	0·61	1	0·01	973	13·53	27	0·38	13	0·18	226	3·14	1,284	17·85	2,240	31·14
	Muddebihál ,, ..	65,024	564·	115·29	149	50	0·77	23	0·35	1,031	15·86	62	0·95	25	0·38	294	4·52	1,485	22·83	2,631	40·46
	Sindgi ,, ..	72,650	812·	89·47	141	15	0·21	6	0·09	1,362	18·61	114	1·57	17	0·23	391	5·38	1,895	26·09	3,057	42·08
	Bágevádi ,, ..	86,743	764·	113·54	120	262	3·02	111	1·28	1,196	13·79	316	3·64	31	0·36	409	4·61	2,316	26·70	3,250	37·47
	Bijápur ,, ..	76,896	869·	88·49	92	97	1·26	111	1·44	1,047	13·62	390	5·07	29	0·38	123	1·60	1,797	23·37	2,692	35·01
	Bágalkot ,, ..	89,132	682·82	130·52	162	279	3·13	583	6·53	1,043	11·70	365	4·11	32	0·36	510	5·72	2,812	31·55	3,621	40·63
	Badámi ,, ..	89,047	676·	131·72	195	255	2·87	786	8·83	1,210	13·59	205	2·30	32	0·36	336	3·76	2,824	31·71	3,716	41·73
	Hungund ,, ..	80,037	518·	154·51	160	63	0·79	147	1·84	1,032	12·89	97	1·21	13	0·16	428	5·35	1,780	22·24	3,483	43·52
	Kaládgi Town Circle	7,024	0·12	58,533·33	1	5	0·71	33	4·70	28	3·99	20	2·85	3	0·42	45	6·41	134	19·08	157	22·35
	1884 ..	638,493	5,757·	110·90	1,141	1,070	1·68	1,800	2·82	8,912	13·96	1,597	2·50	195	0·30	3,763	4·31	16,327	25·57	24,847	38·91
	1883 ..					1,008	1·58	645	1·02	8,318	13·03	1,298	2·03	219	0·34	2,211	3·46	13,699	21·46	2,436	35·14
	Mean for 10 years, 1874-1883 ..					1,749	2·29	210	0·28	12,668	17·96	1,43	1·[illegible]4	325	0·43	5,161	7·29	23,026	30·19	14,995	19·66

Amongst the rural circles the highest death-rate from all causes (31·71 per 1,000), which is nearly the same as that of Bágalkot Táluka (31·55), took place in Bádámi Táluka, in which the death-rate from cholera was 2·87 per 1,000. Small-pox caused 786 deaths, and the death-rate (8·83 per 1,000) from this disease was the highest in the Collectorate. The death-rate from fevers was 13·59 per 1,000 and from bowel-complaints 2·30. From injuries the rate was 0·36 and that from other causes 3·76 per 1,000.

The death-rate from small-pox (6·53 per 1,000) in Bágalkot Táluka was the next highest in the Collectorate.

From fevers the highest death-rate (18·61 per 1,000) in the Collectorate occurred in Sindgi Táluka and from bowel-complaints the highest one in the Collectorate (5·07) is in Bijápur Táluka.

The lowest death-rate (17·85 per 1,000) from all causes, and which is also the lowest in the Collectorate, is found in Indi Táluka, in which 44 deaths or 0·61 per 1,000 were ascribed to cholera. There was only 1 death from small-pox, whilst the death-rate from fevers was 13·53 per 1,000. From bowel-complaints and other causes the rates were respectively, 0·38 and 3·14 per 1,000.

In the town of Kaládgi the death-rate from all causes was 19.08. Cholera caused only 5 deaths and small-pox 33; the rates being respectively 0·71 and 4·70 per 1,000. The death-rate (3·99) from fevers was the lowest in the Collectorate. From bowel-complaints the death-rate was 2·85 per 1,000, and from other causes 6·41 per 1,000, which was the highest in the Collectorate.

The recorded birth and death rates in this town in 1884 as compared with 1883 were as follows:—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Kaládgi	26·05	22·35	16·23	19·08

Except in Kaládgi Town the registration of births appears to be carefully carried out in the Kaládgi Collectorate but the registration of deaths in many of the tálukás is far from being accurate.

In Kaládgi itself the registration of vital statistics is much neglected.

Kánara.

38. The Collectorate of Kanára is divided into 7 tálukás and 4 pethás forming 11 rural circles and 2 town circles. It contains 1,109 towns and villages and covers an area of 3,911 square miles. The population of the Collectorate is 421,840 and the average density per square mile amounts to 107·85 persons. Amongst the rural circles the birth-rates in Kárwár, Honáwar, and Siddápur tálukás and Ankola petha are higher than the death-rates. In other tálukás and pethás the birth-rates are lower than the death-rates. Among the urban circles the town of Kárwár shows a birth-rate (35·03) considerably higher than the death-rate (18·31); but in the town of Kumta the birth-rate (31·14) is lower than the death-rate (39 04). The registration of births in this Collectorate is much behind-hand and greater attention should be paid to this subject.

The total number of deaths in 1884, was 12,660, the death-rate being 30·01 against 26 11 per 1,000 in 1883 and a decennial mean of 32·82.

The maximum monthly mortality (1,301) took place in January and the minimum (937) in October.

Cholera caused 108 deaths during the year which were distributed over July, August, September, November and December. Small-pox was prevalent throughout the year to a great extent and caused 1,306 deaths or 3·10 per 1,000. In 1883 there were 147 deaths or 0·35 per 1,000. The death-rate (16 18 per 1,000) for fevers was much below the decennial mean of the previous 10 years (18·94).

The following statement shows the number of births and the deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the Zilla rate with that of 1883 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Kánara.	Kárwár Rural Circle.	33,981	259·23	126·22	51	..	..	14	·41	417	12·27	27	·79	19	·56	236	6·95	713	20·98	1,230	36·20
	Kumta „ ..	48,129	222·36	216·16	116	..	..	434	9·02	691	14·36	101	2·10	25	·52	469	9·74	1,720	35·74	1,570	32·62
	Ankola Petha „ ..	34,189	367	93·16	88	..	..	18	·53	563	16·47	9	·26	18	·53	287	8·39	895	26·18	1,174	34·34
	Honávar „ ..	54,199	446	191·98	99	..	..	304	·61	740	13·65	71	1·31	20	·37	502	9·26	1,637	30·20	1,842	33·99
	Bhutkal Petha „ ..	31,426			31	..	..	204	6·49	359	11·42	98	3·12	16	·51	222	7·06	899	28·61	775	24·65
	Sirsi „ ..	62,400	779	80·10	258	7	·11	133	2·13	1,118	17·92	71	1·14	30	·48	594	9·52	1,953	31·30	1,497	23·99
	Siddápur „ ..	35,658	239	149·20	95	..	..	11	·31	643	18·03	90	2·52	18	·50	231	7·68	1,043	29·25	1,120	31·41
	Yellápur „ ..	18,629	589	61·65	78	..	..	1	·05	384	20·61	19	1·02	6	·32	155	8·32	565	30·33	482	25·87
	Mundgod Petha „ ..	17,685			75	23	1·30	9	·51	458	25·90	68	3·84	8	·45	125	7·07	691	39·07	423	23·92
	Haliyál „ ..	61,154	980	62·40	216	78	1·28	48	·78	1,215	19·87	177	2·89	26	·42	333	5·45	1,577	30·69	1,401	22·91
	Supa Petha „ ..																				
	Kárwár Town Circle.	13,761	11·77	1169·16	1	..	..	10	·73	113	8·21	8	·58	4	·29	117	8·50	252	18·31	482	35·03
	Kumta „ ..	10,629	7·35	1446·12	1	..	..	120	11·29	126	11·85	23	2·16	2	·19	144	13·55	415	39·01	331	31·14
	1884 ..	421,840	3,911	107·85	1,109	108	·26	1,306	3·10	6,827	16·18	762	1·81	192	·45	3,465	8·21	12,660	30·01	12,327	29·22
					1883 ..	1	..	147	·35	6,365	15·09	799	1·89	195	·46	3,511	8·32	11,018	26·11	13,893	32·72
	Mean for 10 years, 1874—1883 ..					386	·95	120	·30	7,678	18·94	1,163	2·87	223	·55	3,733	9·22	13,308	32·82	11,789	29·08

N. B.—As the population of Supa Petha is included in Haliyál Táluka in the Census Report, the births and deaths are included in it.
The areas in square miles of pethás are included in their respective tálukás, as they are not separately shown in the Census Report.

Amongst the rural circles the highest death-rate from all causes (39·07) and which was also the highest in the Collectorate, took place in Mundgod Petha, in which cholera caused 23 deaths or 1·30 per 1,000. From small-pox there were 9 deaths, the death-rate being 0·51 per 1,000. The death-rate (25·90) for fevers was the highest in the Collectorate. From bowel-complaints the death-rate (3·84 per 1,000) was also the highest in the Collectorate. From injuries and other causes, the rates were respectively, 0·45 and 7·07 per 1,000.

The next highest death-rate (35·74) occurred in Kumta Táluka in which no death from cholera was reported. The deaths from small-pox were 434 and the death rate (9·02 per 1,000) was the highest among the rural registration circles. From fevers the death-rate was 14·36 and from bowel-complaints 2·10. The death-rate (9·74 per 1,000) from other causes was the highest in the rural circles.

The lowest death-rate (20·98) was in Kárwár Táluka in which no death from cholera was returned. Small-pox caused 14 deaths, the death-rate being 0·41. The death-rate from fevers was 12·27 per 1,000 of population. From bowel-complaints the death-rate was 0·79 and from injuries 0·56 per 1,000. The rate from other causes was 6·95.

The next lowest death-rate (26·18) is found in Ankola Petha in which no death from cholera was reported. From small-pox the deaths were 18 or 0·53 per 1,000, whilst the death-rate from fevers was 16·47. The death-rate (0·26 per 1,000) from bowel-complaints was the lowest in the Collectorate. From injuries the rate was 0·53 and from other causes 8·39.

Among the urban circles the highest death-rate from all causes (39·04 per 1,000) took place in the town of Kumta in which no death from cholera was

reported. The death-rate (11·29 per 1,000) from small-pox was the highest in the Collectorate. From fevers the rate was 11·85 and from bowel-complaints 2·16. The death-rate (0·19) from injuries was the lowest and that from other causes (13·55 per 1,000) was the highest in the Collectorate.

The reported death-rate (18·31 per 1,000) from all causes in the town of Kárwár is the lowest in the Collectorate. There were no deaths from cholera, but 10 from small-pox, the rate being 0·73. The death-rate (8·21) for fevers was the lowest in the Collectorate. From bowel-complaints the death-rate was 0·58 and from injuries 0·29 per 1,000. The rate from other causes was 8·50.

The recorded birth and death rates in these towns in 1884 as compared with 1883 were as follows:—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Kárwár	32·56	35·03	19·69	18·31
Do. Kumpta	36·31	31·14	23·99	39·04

The registration of births is fairly carried out in the Kánara Collectorate though there is a falling off as compared with 1883. The registration of deaths appears to be fairly accurate in several of the tálukás, though in some it is lower than I believe to be correct. In the town of Kárwár, it is much neglected.

EASTERN GUJARA'T REGISTRATION DISTRICT.

COLLECTORATES.

1 Surat. 2 Broach. 3 Kaira. 4 Panch Maháls. 5 Ahmedabad.

Surat.

39. The Collectorate of Surat is divided into 8 rural and 2 town circles. It contains 782 towns and villages and covers an area of 1,662 square miles. The population of the Collectorate is 614,198 and the average density per square mile amounts to 369·55 persons. The recorded birth-rate in each táluka and town is higher than the death-rate. In Olpád and Mándvi tálukás the birth-rate is considerably higher than the death-rate. The birth-rate in the former amounted to 41·66 per 1,000 and the death-rate 31·70, and in the latter these rates were respectively 36·78 and 26·71 per 1,000.

The total number of deaths from all causes during 1884 was 17,039, the death-rate being 27·74 per 1,000 against 31·44 in 1883 and a decennial mean of 27·34.

The maximum monthly mortality (1,882) took place in November and the minimum (1,064) in July.

Cholera commenced in March, attained its maximum intensity in April, and disappeared in June. It re-appeared in October but disappeared in the same month; 255 deaths or 0·41 against 591 or 0·96 in 1883 were ascribed to it. Small-pox prevailed till September and caused 63 deaths or 0·10 per 1,000 against 1,342 or 2·18 in 1883. The death-rate (21·65) from fevers was above the decennial mean (19·33) but slightly below the death-rate (22·27) in 1883.

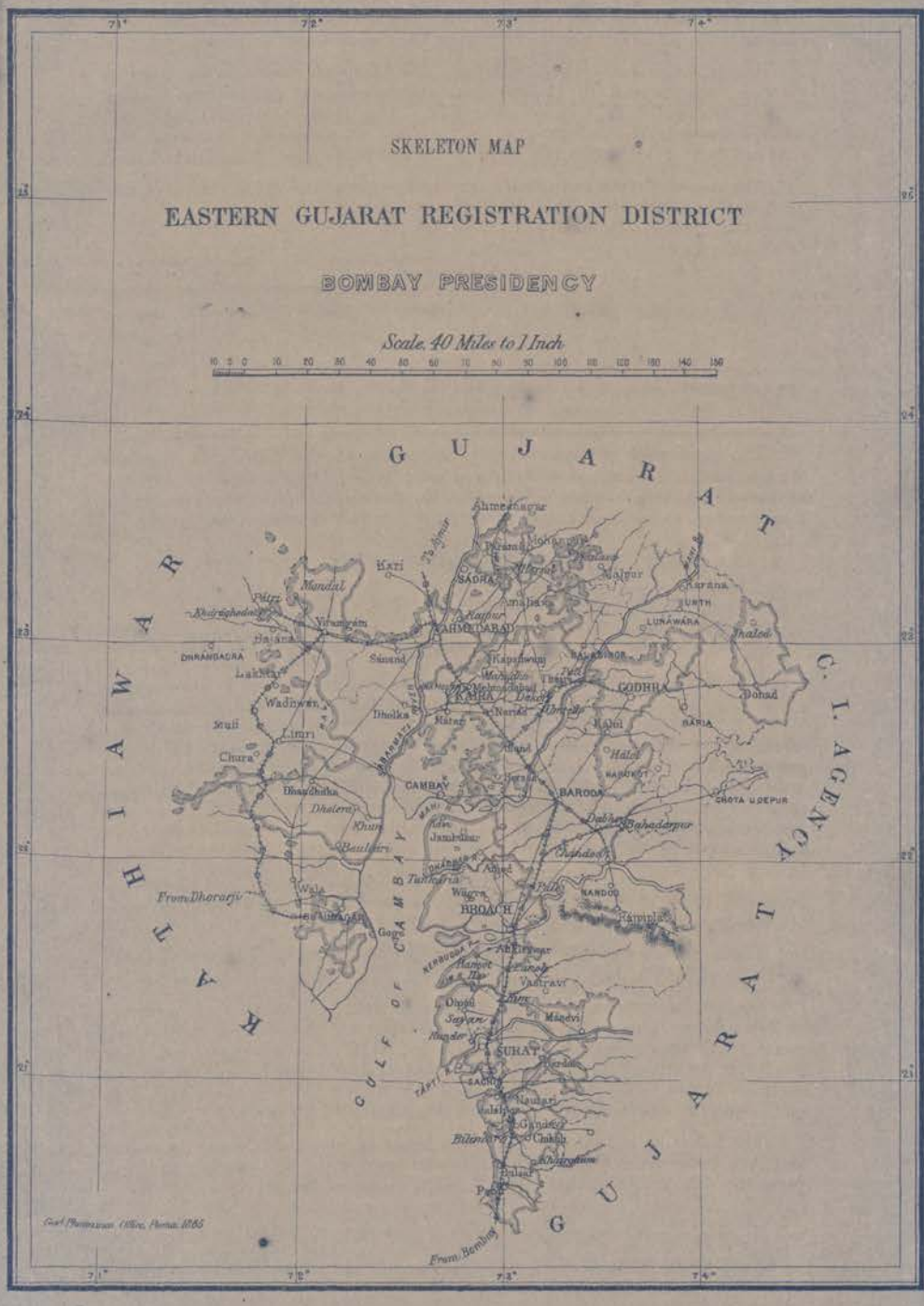
The following statement shows the number of births and deaths by cause and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the Zilla rate with that of 1883 and the mean of the previous 10 years:-

SKELETON MAP

EASTERN GUJARAT REGISTRATION DISTRICT

BOMBAY PRESIDENCY

Scale. 40 Miles to 1 Inch



Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Surat.	Olpád Rural Circle.	62,049	323	192·10	120	45	·73	19	·31	1,392	22·43	314	5·06	26	·42	171	2·75	1,967	31·70	2,585	41·66
	Mándvi „	50,810	280	181·46	141	10	·20	..	..	1,293	25·45	17	·33	27	·53	10	·20	1,357	26·71	1,869	36·78
	Chorási „	44,764	107	418·35	66	30	·67	1	·02	760	16·98	323	7·22	46	1·03	181	4·04	1,341	29·96	1,530	34·18
	Bárdoli „	76,100	222	342·79	124	13	·17	..	..	1,772	23·29	155	2·04	27	0·35	22	·29	1,989	26·14	2,714	35·66
	Jaláipor „	74,016	189	391·62	91	8	·11	2	·03	1,756	23·72	358	4·84	34	·46	12	·16	2,170	29·32	2,402	32·45
	Chikhli „	60,147	167	360·16	62	..	..	3	·05	1,400	23·28	160	2·66	31	·51	50	·83	1,644	27·33	2,121	35·26
	Bulsár „	67,478	205·50	328·36	94	40	·59	9	·13	1,790	26·53	230	3·41	28	·42	36	·53	2,133	31·61	2,417	35·81
	Párdi „	55,761	163	342·09	82	1	·01	29	·52	1,117	20·03	187	3·35	27	·48	36	·65	1,397	25·05	1,702	30·52
	Surat Town Circle.	1,09,844	3	36,614·66	1	107	·97	..	..	1,927	17·54	49	·45	45	·41	769	7·00	2,897	26·37	3,818	34·76
	Bulsár „	13,229	2·50	5,291·60	1	1	·08	..	..	89	6·73	18	1·36	2	·15	34	2·57	144	10·89	297	22·46
	1884 ..	6,14,198	1,662	369·55	782	255	·41	63	·10	13,296	21·65	1,811	2·95	293	·47	1,321	2·16	17,039	27·74	21,455	34·93
	1883 ..					591	·96	1,342	2·18	13,679	22·27	1,833	2·98	256	·42	1,615	2·63	19,316	31·44	21,610	35·18
	Mean for 10 years, 1874—1883.					867	1·42	472	·77	11,777	19·33	1,468	2·39	260	·43	1,825	8·00	16,659	27·34	16,697	27·41

Amongst the rural circles the highest death-rate from all causes (31·70), which is nearly the same as that of Bulsár Táluka (31·61) and which is also the highest in the Collectorate, took place in Olpád Táluka in which cholera carried off 45 persons or 0·73 per 1,000. From small-pox there were 19 deaths or 0·31 per 1,000, whilst the death-rate from fevers was 22·43. The death-rate from bowel-complaints was 5·06 and from injuries 0·42 per 1,000. From other causes the rate was 2·75.

The recorded death-rate from fevers (26·53) in Bulsár town was the highest in the Collectorate whilst the highest death-rate (7·22) from bowel-complaints took place in Chorási Táluka.

The lowest death-rate (25·05) from all causes occurred in Párdi Táluka in which only one death from cholera was recorded. Small-pox caused 29 deaths; the death-rate (0·52) was the highest in the Collectorate. The death-rate from fevers was 20·03 and from bowel-complaints 3·35 per 1,000. From injuries and other causes the rates were respectively 0·48 and 0·65.

Among the town circles the death-rate from all causes (26·37) in the town of Surat was the highest. There were 107 deaths from cholera; the death-rate (0·97) was the highest in the Collectorate. Small-pox caused no death, whilst the death-rate from fevers was 17·54. From bowel-complaints the rate was 0·45 and from injuries 0·41. The death-rate from other causes (7·00) was the highest in the Collectorate.

In the town of Bulsár the recorded death-rate (10·89) from all causes was the lowest in the Collectorate. It proves how defective registration is in this town. Cholera carried off only one person, whilst no deaths from small-pox were returned.

The recorded birth and death rates in these towns in 1884 as compared with 1883 were as follows:—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Surat	32·56	34·76	34·06	26·37
Do. Bulsár	18·52	22·46	16·63	10·89

The serious attention of the authorities is invited to the utterly untrustworthy statistics of Bulsár. Elsewhere in the Collectorate the births are fairly registered. The registration of deaths in some tálukás is fairly accurate but in others below what it should be. In the City of Surat all the deaths cannot have been registered.

Broach.

40. The Collectorate of Broach is divided into 5 tálukás and 1 petha forming 6 rural registration circles and 2 town circles. It contains 405 towns and villages and covers an area of 1,453 square miles. The population of the Collectorate is 326,930 and the average density per square mile amounts to 225 persons. Amongst the rural circles the birth-rate was higher than the death-rate in A'mod, Jambusar and Ankleshvar tálukás and its Petha Hánsot. In Broach and Vágra tálukás the birth-rate was below the death-rate. In the former the birth-rate was 32·79 per 1,000 and the death-rate 36·95 and in the latter they were respectively 33·86 and 36·10 per 1,000. In town circles the birth-rate (30·50) in the town of Broach was below the death-rate (36·96 per 1,000) and in the town of Jambusar the birth-rate (43·56) was slightly higher than the death-rate (43·21 per 1,000.)

The total number of deaths in 1884 from all causes was 11,493, the death-rate being 35·15 per 1,000 against 27·88 in 1883 and a decennial mean of 28·91. The maximum monthly mortality (1,396) took place in November and the minimum (653) in July.

Cholera was present at the close of 1883 and during 1884 attained its maximum intensity in May but disappeared in October. Six hundred and seven deaths or 1·85 per 1,000 of population were ascribed to it. Only 11 deaths were recorded from small-pox during the year against 140 in 1883. The deaths from fevers amounted to 9,388 or 28·72 per 1,000 against 23·12 in 1883 and a decennial mean of 23·82. The death-rate from bowel-complaints (1·90 per 1,000) was slightly above that of 1883 (1·87) and the decennial mean (1·60).

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate and compares the Zilla rate with that of 1883 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Broach	Broach Rural Circle.	73,280	300·32	244·01	104	136	1·85	3	·04	2,269	30·96	170	2·33	25	·34	105	1·43	2,708	36·95	2,403	32·79
	Vágra ,, ..	33,902	308	110·07	69	50	1·47	4	·12	1,122	33·10	29	·85	11	·32	8	·24	1,224	36·10	1,148	33·86
	A'mod ,, ..	39,641	176	225·23	48	17	·43	..	..	1,038	26·18	23	·58	8	·20	132	3·33	1,218	30·72	1,349	34·04
	Jambusar ,, ..	66,293	372·46	177·99	82	158	2·38	..	..	1,962	29·60	92	1·39	19	·29	7	·10	2,238	33·76	2,536	38·25
	Ankleshvar ,... / Hánsot Petha ,...	65,054	294	221·27	100	116	1·78	4	·06	1,836	28·23	40	·61	33	·51	182	2·80	2,231	34·29	2,381	36·60
	Broach Town Circle.	37,291	1·68	22,191·07	1	126	3·38	..	..	960	25·75	1	·03	12	·32	270	7·48	1,378	36·96	1,137	30·50
	Jambusar ,, ..	11,479	0·54	21,257·47	1	4	·35	..	..	181	15·77	267	23·26	6	·52	38	3·31	496	43·21	500	43·56
	1884 ..	326,930	1,453	225·00	405	607	1·85	11	·03	9,388	28·72	622	1·90	114	·35	751	2·30	11,493	35·15	11,454	35·03
					1883 ..	88	·27	140	·43	7,560	23·12	610	1·87	130	·40	586	1·79	9,114	27·88	10,903	33·35
	Mean for 10 years, 1874—1883 ..					316	·92	144	·42	8,176	23·82	551	1·60	131	·38	610	1·77	9,928	28·91	7,103	20·69

N. B.—The births and deaths in Hánsot Petha are included in Ankleshvar Táluka as in the Census Report, the population of each is not separately shown.

Amongst the rural circles the highest death-rate from all causes (36·95 per 1,000 of population) which is nearly the same as that of Vágra Táluka (36·10) took place in Broach Táluka, in which cholera carried off 136 persons or 1·85 per 1,000. Small-pox caused only 3 deaths or 0·04 per 1,000, whilst the death-rate from fevers was 30·96 per 1,000. The death-rate (2·33) from bowel-complaints was the highest among the rural registration circles. From injuries the death-rate was 0·34 and from other causes 1·43 per 1,000.

The death-rate (33·10) from fevers in Vágra Táluka was the highest in the Collectorate.

The next highest death-rate from all causes (34·29 per 1,000) occurred in Ankleshvar Táluka and its Petha Hánsot, in which 116 deaths or 1·78 per 1,000 were returned from cholera. Small-pox caused 4 deaths, the death-rate being 0·06 per 1,000 of population. The death-rate from fevers was 28·53 per 1,000 and from bowel-complaints 0·61 per 1,000, whilst that of injuries and other causes 0·51 and 2·80 respectively.

The lowest death-rate (30·72 per 1,000) occurred in A'mod Táluka, in which 17 deaths or 0·43 per 1,000 from cholera were returned. Small-pox caused no death, whilst the death-rate from fevers was 26·18 per 1,000, which is the lowest amongst the rural circles. From bowel-complaints the death-rate was 0·58 per 1,000 and that from injuries 0·20. The death-rate, 3·33 per 1,000, from other causes in this táluka is the highest amongst the rural registration circles.

Amongst the urban circles the death-rate from all causes (43·21 per 1,000 of population) in the town of Jambusar is the highest in the Collectorate. There were 4 deaths from cholera but none from small-pox, whilst the death-rate from fevers (15·77 per 1,000) is the lowest in the Collectorate. A remarkably high death-rate (23·26 per 1,000) from bowel-complaints is returned in this town, whilst the death-rates from injuries and other causes were respectively 0·52 and 3·31 per 1,000 of population. The very high death-rate from bowel-complaints in this town, as noticed last year, must probably have been due to an impure water-supply.

In the town of Broach the death-rate from all causes was 36·96 per 1,000. Cholera carried off 126 persons; the death-rate (3·38 per 1,000) was the highest in the Collectorate; small-pox caused no death, whilst the death-rate from fevers was 25·75 per 1,000. There was only 1 death from bowel-complaints. The death-rate from injuries was 0·32 per 1,000, whilst that from other causes (7·48 per 1,000) was the highest in the Collectorate.

The recorded birth and death rates in these towns in 1884 as compared with 1883 were as follows:—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Broach	21·57	30·50	28·11	36·96
Do. Jambusar...	40·16	43·56	35·46	43·21

The registration of vital statistics in Broach Collectorate appears to be fairly carried out.

Kaira.

41. The Collectorate of Kaira is divided into 7 rural and 4 town circles. It contains 581 towns and villages and covers an area of 1,609 square miles. The population of the Collectorate is 804,800 and the average density per square mile amounts to 500·18 persons. Amongst the rural circles the recorded birth-rate was higher than the death-rate in each táluka. In táluka Borsad the birth-rate (41·38 per 1,000) was considerably higher than the death-rate (26·99). Amongst the urban circles the birth-rates in the towns of Kaira and Nadiád were slightly higher than the

death-rates. In the former the birth-rate was 31·80 per 1,000 and the death-rate 30·46 and in the latter the respective rates were 31·59 and 30·70. In the town of Kapadvanj the birth-rate (33·17) was much below the death-rate (41·13), and in Borsad the birth-rate (21·42) was slightly below the death-rate (22·49).

The total number of deaths from all causes in 1884 was 23,023, the death-rate being 28·60 per 1,000 of population against 25·11 in 1883 and a decennial mean of 27·61.

The maximum monthly mortality (2,426) took place in November and the minimum (1,366) in January.

Cholera commenced in May, attained its maximum intensity in July, and disappeared in September, but re-appeared in December. Three hundred and ninety-six deaths or 0·49 per 1,000 of population were ascribed to it. Small-pox prevailed from February to July and caused 138 deaths against 13 in 1883, the death-rate being 0·17 per 1,000 against 0·02 in 1883 and a decennial mean of 0·25. The death-rate from fevers (22·69 per 1,000) was slightly above the decennial mean (22·33) whilst in 1883 it was 20·09 per 1,000. The death-rate from bowel-complaints (3·32) was higher than in 1883 (2·68) and the decennial mean (2·51).

The following table shows the number of births and deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the Zilla rate with that of 1883 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Kaira.	Mehmadabad Rural Circle	76,296	178·72	439·19	59	3	·04	...	..	1,971	25·83	334	4·38	31	·41	109	1·43	2,448	32·09	2,890	37·88
	Nadiád ,,	1,33,952	223·67	598·88	92	29	·29	7	·05	2,997	22·37	426	3·18	60	·45	238	1·78	3,767	28·12	4,838	36·12
	Borsad ,,	1,31,002	217·81	601·87	89	47	·36	1	...	2,637	20·12	593	4·52	48	·37	212	1·62	3,538	26·99	5,425	41·38
	A'nand ,,	1,54,118	243·	634·23	76	219	1·42	36	·23	3,024	19·62	588	3·82	73	·47	404	2·62	4,344	28·18	6,071	39·39
	Thásra ,,	84,866	253·	335·44	97	7	·08	28	·33	2,017	23·77	189	2·22	29	·34	66	·78	2,336	27·53	3,256	38·37
	Kapadvanj ,,	78,582	279·77	280·88	85	21	·27	23	·29	1,573	20·02	171	2·17	25	·32	116	1·48	1,929	24·55	2,791	35·52
	Mátar ,,	78,279	217·	360·79	81	...	...	...	...	2,260	28·87	208	2·66	25	·32	45	·57	2,538	32·42	2,917	37·26
	Kaira Town Circle	12,640	0·28	45,142·86	1	1	·08	1	·08	303	23·97	57	4·51	2	·16	21	1·66	385	30·46	402	31·80
	Nadiád ,,	28,304	0·83	35,769·70	1	...	.	2	·07	844	29·82	1	·04	18	·63	4	·14	869	30·70	894	31·59
	Borsad ,,	12,228	0·19	64,357·89	1	37	3·02	...	...	233	19·05	2	·17	2	·17	1	·08	275	22·49	262	21·42
	Kapadvanj ,,	14,442	0·23	62,791·30	1	22	1·52	40	2·77	401	27·77	102	7·06	4	·28	25	1·73	594	41·13	479	33·17
	1884	8,04,500	1,609	500·18	581	396	·49	138	·17	18,260	22·69	2,671	3·32	317	·39	1,241	1·54	23,023	28·60	30,225	37·56
	1883					282	·35	13	·02	16,170	20·09	2,159	2·68	346	·43	1,239	1·54	20,209	25·11	28,998	36·03
	Mean for 10 years, 1874—1883					597	·76	200	.25	17,627	22·33	1,983	2·51	331	·42	1,057	1·34	21,795	27·61	21,321	27·01

Amongst the rural circles the highest death-rate from all causes (32·42 per 1,000) which is nearly the same as that of Mehmádabad Táluka (32·09) took place in Mátar Táluka, in which there were no deaths either from cholera or small-pox. The death-rate (28·87) from fevers was the highest amongst the rural registration circles. From bowel-complaints the death-rate was 2·66 and from injuries 0·32 per 1,000. The rate from other causes (0·57) was the lowest in the rural circles.

In Mehmadabad Táluka cholera caused only 3 deaths or 0·04 per 1,000. No death from small-pox was recorded in it whilst the death-rate from fevers was 25·83. The death-rate from bowel-complaints was 4·38 per 1,000.

The lowest death-rate from all causes (24·55) occurred in Kapadvanj Táluka in which there were 21 or 0·27 per 1,000 deaths from cholera. Small-pox caused 23 deaths or 0·29 per 1,000, whilst the death-rate from fevers was 20·02. The death-rate from bowel-complaints was 2·17 and from injuries 0·32. From other causes the rate was 1·48 per 1,000.

Amongst the urban circles the death-rate from all causes (41·43 per 1,000 of population) in the town of Kapadvanj is the highest in the Collectorate, in which 22 deaths or 1·52 per 1,000 were ascribed to cholera. The death-rate from small-pox (2·77 per 1,000) is the highest in the Collectorate, whilst the death-rate from fevers was 27·77 per 1,000. The highest death-rate in this town from bowel-complaints (7·06 per 1,000) is the highest in the Collectorate.

The lowest death-rate from all causes (22·49 per 1,000) is found in the town of Borsad in which 37 deaths were recorded from cholera. The death-rate from cholera (3·02 per 1,000) is the highest in the Collectorate. Small-pox caused no death, whilst the death-rate from fevers was 19·05 per 1,000. Bowel-complaints caused only 2 deaths.

The recorded birth- and death rates in each town in 1884 as compared with 1883 were as follows :—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Kaira	33·23	31·80	34·49	30·46
„ Nadiád	31·90	31·59	33·92	30·70
„ Borsad	21·02	21·42	19·30	22·49
„ Kapadvanj	22·71	33·17	29·22	41·13

The registration of births and deaths in Borsad is much neglected. In the tálukás the registration of births appears to be fairly carried out, but that of deaths requires much improvement.

Panch Maháls.

42. The Collectorate of Panch Maháls is divided into 5 rural and 2 town circles. It contains 675 towns and villages and covers an area of 1,613 square miles. The population of the Collectorate is 255,479 and the average density per square mile amounts to 158·38 persons. The recorded birth-rates in each táluka and the town of Dohad are higher than the death-rates. In Dohad and Jhálod tálukás the birth-rates (40·05 and 37·07) are more than double their death-rates (15·48 and 14·60 respectively). These death-rates prove unmistakably that the registration in these tálukás is defective. In Godhra Táluka the birth-rate (36·35 per 1,000) is double the death-rate (18·08); but in the town of Godhra the birth-rate (18·06) is below the death-rate (19·49); such returns are simply worthless.

The total number of deaths from all causes in 1884 amounted to 4,983, the death-rate per 1,000 being 19·50 against 16·83 in 1883 and a decennial mean of 22·25.

The maximum monthly mortality (604) took place in March and the minimum (326) in September.

Cholera commenced in April, attained its maximum intensity in July, and disappeared in October after causing 275 deaths or 1·08 per 1,000 of population.

Small-pox prevailed until July and caused 74 deaths or 0·29 against 31 or 0·12 in 1883. The death-rate (16·88) from fevers was slightly above the mean of the previous 10 years (16·79) and a little higher than the rate in 1883 (15·56). The death-rate (0·45) from bowel-complaints was much below the mean of the previous 10 years (1·24) and slightly higher than the rate in 1883 (0·37).

The following table shows the number of births and deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate; and compares the Zilla rate with that of 1883 and the mean of the previous 10 years :—

Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Panch Mahals. Rural.																				
Godhra Rural Circle ...	64,976	597·83	108·69	232	9	·14	22	·34	1,083	16·66	26	·40	22	·34	13	·20	1,175	18·08	2,362	36·35
Dohad " ...	47,219	599·83	147·12	120	19	·40	1	·02	637	13·49	22	·47	24	·51	28	·59	731	15·48	1,891	40·06
Jhálod " ...	41,026			99	3	·07	6	·15	553	13·48	15	·37	14	·34	8	·19	599	14·60	1,521	37·07
Kálol " ...	43,269	415·	184·39	68	135	3·12	22	·51	994	22·97	29	·67	20	·46	19	·44	1,219	28·17	1,511	34·92
Hálol " ...	33,253			156	59	1·77	7	·21	668	20·09	3	·09	14	·42	1	·03	752	22·61	1,124	33·80
Godhra Town Circle ...	13,342	0·17	78,482·35	1	24	1·80	15	1·12	186	13·94	10	·75	5	·37	20	1·50	260	19·49	241	18·06
Dohad " ...	12,394	0·17	72,905·88	1	26	2·10	1	·08	193	15·57	10	·81	9	·73	8	·64	247	19·93	276	22·27
1884 ...	255,479	1613·	158·38	675	275	1·08	74	·29	4,314	16·88	115	·45	108	·42	97	·38	4,983	19·50	8,926	34·94
1883 ...					28	·11	31	·12	3,974	15·56	94	·37	108	·42	65	·25	4,360	16·83	6,629	25·95
Mean for 10 years, 1874—1883 ...					568	2·32	37	·15	4,116	16·79	305	1·24	116	·47	314	1·28	5,456	22·25	5,526	22·54

N. B.—The area in Square Miles of Dohad and Jhálod Tálukás is shown together as well as that of Kálol and Hálol Tálukás in the Census Report.

Amongst the rural circles the death-rate from all causes (28·17) in Kálol Táluka is the highest in the Collectorate. There were 135 deaths from cholera; the death-rate (3·12) was the highest in the Collectorate. From small-pox 22 deaths were recorded; the death-rate 0·51 per 1,000 was the highest among the rural registration circles, whilst the death-rate (22·97) from fevers was the highest in the Collectorate. From bowel-complaints the death-rate was 0·67 and from injuries 0·46. The rate from other causes was 0·44.

The next highest death-rate (22·61 per 1·000) took place in Hálol Táluka, in which 159 deaths or 1·77 per 1,000 were attributed to cholera. Small-pox caused 7 deaths, whilst the death-rate from fevers (20·09) was the next highest in the Collectorate. The death-rate (0·09) from bowel-complaints was the lowest in the Collectorate. From injuries the death-rate was 0·42 and from other causes 0·03 which was the lowest in the Collectorate.

The lowest recorded death-rate from all causes (14·60) is reported in Jhálod Táluka. It shows how entirely registration is neglected in this táluka. Cholera is said to have carried off only three persons. From small-pox there were 6 deaths reported or 0·15 per 1,000, whilst the death-rate (13·48) from fevers was the lowest in the Collectorate. The recorded death-rate from bowel-complaints was only 0·37 and from injuries 0·34. From other causes the rate was 0·19. Such returns are valueless and vitiate all our statistics.

Amongst the urban circles the death-rate from all causes (19·93), which is nearly the same as that of the town of Godhra (19·49), took place in the town of Dohad, in which cholera carried off 26 persons out of a population of 12,394 souls, the death-rate being 2·10. There was only 1 death from small-pox,

whilst the death-rate from fevers was 15·57 per 1,000. The death-rate from bowel-complaints (0·81 per 1,000) in this town was the highest in the Collectorate and from injuries (0·73) was the same. From other causes the rate was 0·64.

In the town of Godhra 24 deaths were ascribed to cholera, the death-rate being 1·80 per 1,000. Small-pox caused 15 deaths and the death-rate (1·12) from it was the highest in the Collectorate. From fevers the death-rate was 13·94 and from bowel-complaints 0·75. The death-rate (1·50) from other causes was the highest in the Collectorate.

The recorded birth and death rates in these towns in 1884 as compared with 1883 were as follows :—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Godhra	6·22	18·06	12·29	19·49
„ Dohad	19·04	22·27	20·01	19·93

The registration of vital statistics in the Towns of Godhra and Dohad is much neglected whilst in the tálukás, the registration of births may be considered fairly accurate; but that of deaths is manifestly so inaccurate as to be entirely valueless.

Ahmedabad.

43. The Collectorate of Ahmedabad is divided into 7 rural, 4 town and 1 Cantonment circle. It contains 862 towns and villages and covers an area of 3,821 square miles. The population of the Collectorate is 856,324 and the average density per square mile amounts to 224·10 persons. The recorded birth-rate in each táluka except the Sánand táluka is higher than the death-rate. In Sánand Táluka the birth-rate (22·76) was below the death-rate (23·42). Amongst the town circles the birth-rates in Gogha (36·39) and in Dholka (40·64) are higher than the death-rates (28·74) and (16·43) per 1,000 respectively, but in the towns of Ahmedabad and Viramgám the birth-rates were considerably below the death-rates. In the former the birth-rate was 42·03, the death-rate being 49·07, and in the latter 45·92 and 61·24 respectively. In the Cantonment of Ahmedabad registration is entirely neglected as the birth-rate was (7·36) and the death-rate (10 51).

The total number of recorded deaths from all causes in 1884 was 25,352, the death-rate per 1,000 being 29·60 against 23·55 in 1883 and the decennial mean of 28·26.

The maximum monthly mortality (2,964) took place in November and the minimum (1,473) in June.

Cholera commenced in May, attained its maximum intensity in September and disappeared in November after causing 116 deaths, the death-rate being 0·14 against 0·16 in 1883. Small-pox prevailed to a great extent and caused 260 deaths or 0·30 per 1,000 against 68 or 0·08 in 1883. The death-rate (22·98 per 1,000) from fevers was much higher than the death-rate (18·55) in 1883, the decennial mean of 21·08. The death-rate (2·25 per 1,000) from bowel-complaints was above the mean of the previous 10 years (1·52) and the rate in 1883 (1·48).

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each Táluka, Town and Cantonment in the Collectorate, and compares the Zilla rate with that of 1883 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-Complaints. Number.	Bowel-Complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Ahmedabad.	Daskroi Rural Circle	1,43,943	345·90	416·26	137	..	..	1	·01	3,263	22·67	199	1·38	43	·30	51	·35	3,557	24·71	4,756	33·04
	Gogha ,, ..	22,307	223·25	99·92	62	..	..	29	1·30	450	20·17	46	2·06	7	·31	72	3·23	604	27·07	834	37·38
	Dhandhuka ,, ..	1,23,107	1,098	112·12	141	..	..	9	·07	2,020	16·41	737	5·99	24	·19	577	4·69	3,367	27·35	4,705	38·22
	Sánand ,, ..	76,964	360	213·79	85	..	..	13	·17	1,587	20·62	124	1·61	21	·27	58	·75	1,803	23·42	1,752	22·76
	Viramgám ,, ..	1,17,584	676·39	173·84	155	..	..	37	·31	2,386	20·29	82	·70	13	·11	119	1·01	2,637	22·42	3,307	28·12
	Parántij ,, ..	1,07,554	449	239·54	161	30	·28	134	1·24	2,266	21·07	73	·68	26	·24	112	1·04	2,641	24·55	3,361	31·25
	Dholka ,, ..	93,476	664·25	140·72	117	..	..	10	·11	2,589	27·70	209	2·24	31	·33	94	1·00	2,933	31·38	3,014	32·24
	Ahmedabad Town Circle.	1,24,767	2·20	56,712·27	1	59	·47	3	·02	4,013	32·16	73	·59	9	·07	1,956	15·76	6,123	49·07	5,244	42·03
	Gogha ,, ..	7,063	0·75	9,417·33	1	..	..	12	1·70	105	14·87	79	11·18	5	·71	2	·28	203	28·74	257	36·39
	Viramgám ,, ..	18,990	0·61	31,131·15	1	27	1·42	12	·63	809	42·60	237	12·48	8	·42	70	3·69	1,163	61·24	872	45·92
	Dholka ,, ..	17,716	0·75	23,621·33	1	..	..	..	..	170	9·60	66	3·73	3	·17	52	2·93	291	16·43	720	40·64
	Ahmedabad Cantonment.	2,854	..	..	..	..	..	..	..	23	8·05	1	·35	..	..	6	2·10	30	10·51	22	7·36
	1884 ..	8,56,324	3,821	224·10	862	116	·14	260	·30	19,681	22·98	1,926	2·25	190	·22	3,179	3·71	25,352	29·60	28,844	33·68
	1883 ..					139	·16	68	·08	15,885	18·55	1,265	1·48	207	·24	2,603	3·04	20,167	23·55	26,917	31·42
	Mean for 10 years, 1874—1883 ..					825	·98	219	·26	17,659	21·08	1,273	1·51	247	·30	3,453	4·12	23,676	28·26	19,146	22·85

N.B.—The area of the Cantonment of Ahmedabad is included in the town of Ahmedabad as it is not separately shown in the Census Report.

Amongst the rural circles the highest death-rate from all causes (31·38 per 1,000) took place in Dholka Táluka in which no death was recorded from cholera. From small-pox there were 10 deaths or 0·11 per 1,000, whilst the death-rate (27·70) from fevers was the highest among the rural circles. The death-rate from bowel-complaints was 2·24 and from injuries 0·33. From other causes the death-rate was 1·00.

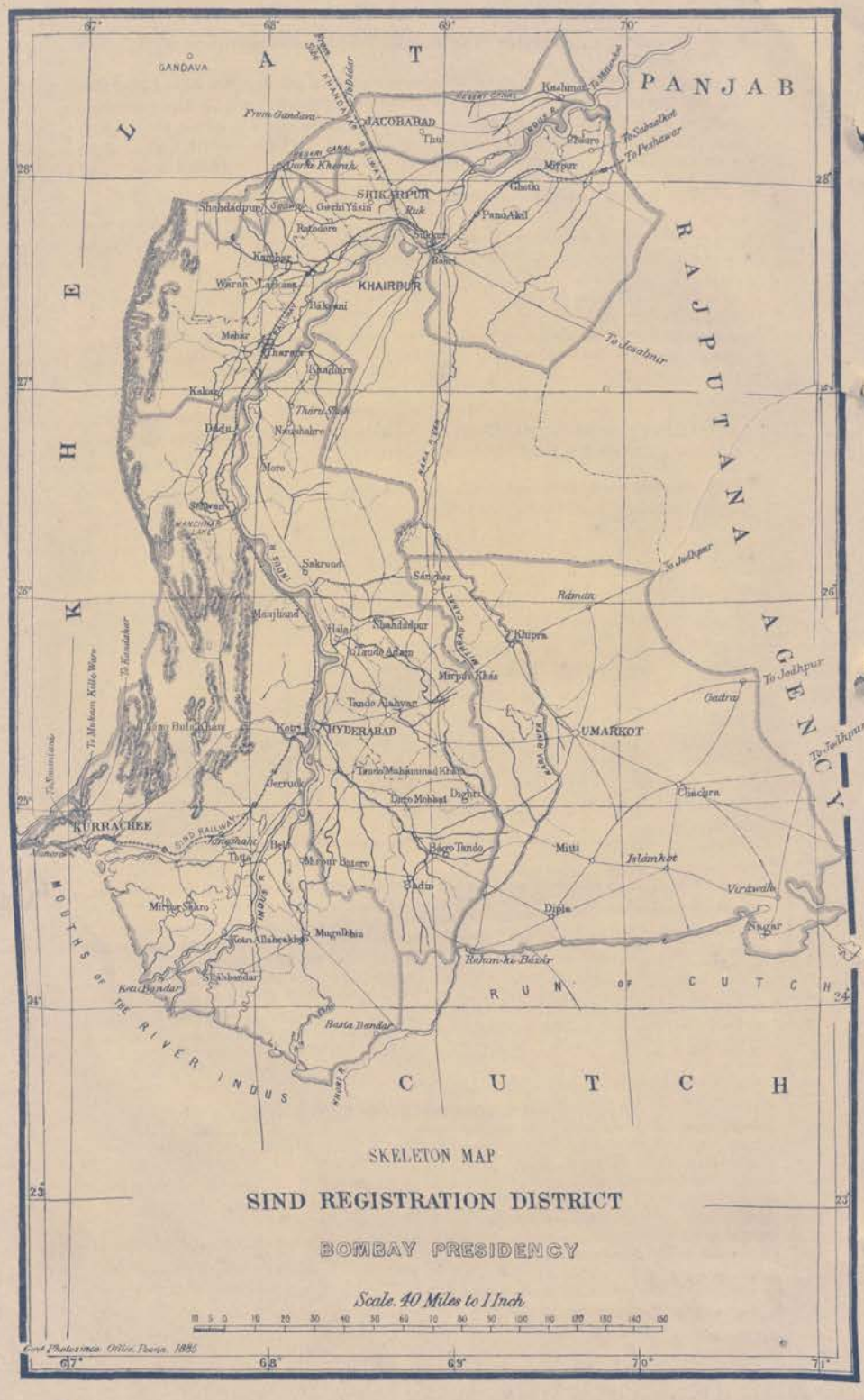
The next highest death-rate (27·35), which is nearly the same as that of Gogha Táluka, (27·07) occurred in Dhandhuka Táluka, in which no death from cholera was returned. From small-pox the deaths were 9, the death-rate being 0·07, whilst the death-rate (16·41) from fevers was the lowest among the rural registration circles. The death-rate from bowel-complaints(5·99) was the highest in the rural registration circles. From injuries and other causes the death-rates were respectively 0·19 and 4·69; the latter was the highest among the rural circles.

In Gogha Táluka no death from cholera was reported. From small-pox there were 29 deaths. The death-rate (1·30) was the highest among the rural circles. The death-rate from fevers was 20·17 and from bowel-complaints 2·06 per 1,000.

The lowest death-rate from all causes (22·42) was found in Viramgám Táluka. There were no deaths from cholera, but 37 or 0·31 from small-pox, whilst those from fevers amounted to 2,386 or 20·29 per 1,000. From bowel-complaints the death-rate was 0·70 and from other causes 1·01 per 1,000.

The next lowest death-rate (23·42) occurred in Sánand Táluka, in which no deaths from cholera were reported during the year. Small-pox caused 13 deaths, the rate being 0·17, whilst the rate from fevers was 20·62. The death-rate from bowel-complaints was 1·61 and from injuries 0·27 per 1,000. From other causes the death-rate was 0·75.

Amongst the urban circles the exceedingly high death-rate from all causes (61·24 per 1,000 of population) is reported to have occurred in the town of



SKELETON MAP
SIND REGISTRATION DISTRICT
BOMBAY PRESIDENCY
Scale. 40 Miles to 1 Inch
Govt Photozinco Office, Poona. 1885
PANJAB
RAJPUTANA AGENCY
KHELAT
CUTCH
RUN OF CUTCH
MOUTHS OF THE RIVER INDUS
GANDAVA
JACOBABAD
SHIKARPUR
KHAIRPUR
HYDERABAD
UMARKOT
KURRACHEE
Kashmor
Thul
Gurhi Kherah
Shahdadpur
Gurhi Yasin
Ratodero
Kambar
Warah
Larkana
Bakrani
Mehar
Tharam
Kandharo
Kakar
Dadu
Nausahro
Moro
Sehwan
Sakrand
Sanghar
Manjhand
Hala
Shahdadpur
Tando Adam
Mirpur Khas
Tando Alahyar
Kotri
Tando Muhammad Khan
Dero Mobbat
Dighri
Jerruck
Jangshahi
Belo
Thatta
Mirpur Batoro
Badin
Bago Tando
Mirpur Sakro
Kotri Allahbakhsh
Mugalbhin
Shahbandar
Kotri Bandar
Basta Bandar
Rahim-ki-Bazar
Diple
Mitti
Islamkot
Chachra
Nagar
Virawah
Gadra
Khipra
Ramun
Ghotki
Panu Akil
Sukkur
Rohri
Mirpur
Chauro
To Sabzalkot
To Peshawar
To Jesalmir
To Jodhpur
To Kandahar
To Mukam Killa Wara
To Sonmiani
From Gandava
From Sibi
To Dadar
Kara River
Indus R.
Nhori R.
Sind Railway
Manchar Lake
Mitrad Canal
Nara River

Viramgám. Cholera carried off 27 persons or 1·42 per 1,000. This rate is the highest in the Collectorate. Small-pox caused 12 deaths, whilst the death-rate (42·60) from fevers was the highest in the Collectorate. The death-rate (12·48 per 1,000) from bowel-complaints was also the highest in the Collectorate. From injuries and other causes the rates were respectively 0·42 and 3·69.

The lowest recorded death-rate (16·43) took place in Dholka town. There were no deaths from cholera or small-pox. Fever caused 170 deaths or 9·60 per 1,000. The death-rate from bowel-complaints was 3·73 and from injuries 0·17; from other causes 2·93. Such returns are valueless.

In the town of Ahmedabad the death-rate from all causes amounted to the very high rate of 49·07 per 1,000. Cholera carried off 59 persons or 0·47. Small-pox caused only 3 deaths, whilst the rate from fevers was 32·16. From bowel-complaints the death-rate was 0·59 whilst the rate (15·76) from other causes was the highest in the Collectorate.

The recorded death-rate from all causes (10·51) in the Cantonment of Ahmedabad is utterly untrustworthy. No deaths were ascribed to cholera or small-pox; 23 deaths were attributed to fevers.

The recorded birth and death rates in each Town and Cantonment in 1884 as compared with 1883 were as follows.—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Ahmedabad	43·71	42·03	40·80	49·07
„ Gogha	35·54	36·39	22·65	28·74
„ Viramgám	32·81	45·92	33·75	61·24
„ Dholka	29·35	40·64	18·29	16·43
„ Cantonment of Ahmedabad.	12·71	7·36	23·48	10·51

Whilst the registration of births in each town was very creditable the registration of deaths at Gogha and Dholka is manifestly inaccurate.

The lessened population may account for the lower birth and death rates in the Cantonment of Ahmedabad. In the tálukás the registration of births is not so carefully performed as it should be and the registration of deaths in some tálukás is evidently neglected.

SIND REGISTRATION DISTRICT.

COLLECTORATES.

1. Karáchi ...
2. Hyderabad ...
3. Thar and Párkar ...
4. Shikárpur.
5. Upper Sind Frontier.

Karáchi.

44. The Collectorate of Karáchi is divided into 13 rural and 1 town circles. It contains 723 towns and villages and covers an area of 14,115 square miles. The population of the Collectorate is 478,688 and the average density per square mile

amounts to 33·91 persons. The recorded birth-rates in the tálukás of Kohistán, Dádú, Mánjhand, Tatta, Sakro, Ghorábári and Sháhbandar are higher than the death-rates. In the remaining 6 tálukás the birth-rates are lower than the death-rates. In the town of Karáchi the birth-rate (46·64) is much higher than the death-rate (24·54).

The total number of recorded deaths from all causes in 1884 amounted to 8,419, the death-rate being 17·59 per 1,000 against 14·98 in 1883 and the decennial mean of 15·61.

The maximum monthly mortality (1,133) took place in November and the minimum (446) in August.

Cholera commenced in October, attained its maximum intensity in November and continued till December; 517 deaths were ascribed to it. The death-rate (1·08) was above the decennial mean for the previous 10 years (0·28). Small-pox prevailed throughout the year to a great extent and caused 196 deaths against 270 in 1883; the death-rate was 0·41 per 1,000 against 0·56 in 1883, the mean of 10 years being 0·18. The recorded death-rate from fevers (12·39) was above the decennial mean (11·81), whilst the death-rate from bowel-complaints was 0·38 against 0·40 in 1883 and a decennial mean of 0·29.

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate and compares the Zilla rate with that of 1883 and the mean of the previous 10 years:—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Karáchi.	Karáchi Rural Circle	20,246	1,224·34	15·77	Information not available in the Census Report.	19	0·94	..	..	81	4·00	..	..	7	0·34	14	0·69	121	5·97	100	4·94
	Kohistan ,, ..	11,957	2,652	4·51		..	..	3	0·25	121	10·12	1	0·08	1	0·08	50	4·18	176	14·71	265	22·16
	Dádú ,, ..	66,811	763	87·56		9	0·15	21	0·31	812	12·15	5	0·07	14	0·22	72	1·08	933	13·96	1,633	24·44
	Sehwán ,, ..	54,327	923	58·86		50	0·92	40	0·74	911	16·77	41	0·75	21	0·39	90	1·66	1,153	21·23	954	17·56
	Mánjhand ,, ..	18,952	581	32·62		..	..	25	1·32	450	23·74	9	0·47	10	0·53	30	1·58	524	27·64	584	30·81
	Kotri ,, ..	24,870	839	29·64		54	2·17	37	1·49	342	13·75	14	0·56	8	0·32	60	2·41	515	20·70	335	13·47
	Tatta ,, ..	39,750	1,338	30·05		1	0·02	9	0·22	572	14·39	7	0·18	20	0·50	47	1·18	656	16·50	925	23·27
	Sákro ,, ..	21,711	1,108	19·59		..	..	2	0·09	267	12·30	5	0·23	17	0·78	19	0·88	310	14·28	403	18·56
	Ghorábári ,, ..	34,360	566	60·70		17	0·49	26	0·76	437	12·72	1	0·02	15	0·44	63	1·83	559	16·27	623	18·28
	Mirpur Batoro ,, ..	32,179	268	120·07		59	1·83	7	0·22	414	12·87	9	0·28	17	0·53	21	0·65	527	16·38	361	11·22
	Sujáwal ,, ..	30,314	267	113·53		51	1·68	5	0·16	239	7·88	11	0·36	11	0·36	49	1·62	366	12·07	347	11·45
	Jati ,, ..	27,065	2,145	12·61		117	4·32	10	0·37	263	9·72	3	0·11	13	0·48	21	0·78	427	15·78	232	8·57
	Sháhbandar ,, ..	27,814	1,388	20·04		139	5·00	4	0·14	277	9·96	3	0·11	19	0·68	33	1·19	475	17·08	683	24·56
	Karáchi Town Circle	68,332	7·60	8,920·63	1	1	0·02	1	0·10	745	10·90	74	1·08	21	0·31	829	12·13	1,677	24·54	3,187	46·64
	1884 ..	478,688	14,115	33·91	723	517	1·08	196	·41	5,931	12·39	183	·38	194	·41	1,396	2·92	8,419	17·59	10,637	22·22
	1883 ..					..	..	270	·56	5,148	10·75	191	·40	311	·65	1,253	2·62	7,173	14·98	9,005	18·81
	Mean for 10 years, 1874—1883 ..					122	·28	78	·18	5,199	11·81	127	·29	291	·66	1,053	2·39	6,870	15·61	5,756	13·08

Amongst the rural circles the highest death-rate from all causes (27·64) per 1,000 took place in Mánjhand Táluka, in which no deaths were ascribed to cholera. From small-pox there were 25 deaths, the death-rate being 1·32 per 1,000. The death-rate (23·74 per 1,000) from fevers was the highest in the Collectorate. From bowel-complaints the death-rate was 0·47 and from injuries 0·53. The death-rate from other causes was 1·58 per 1,000.

The lowest death-rate (5·97) occurred in Karáchi Táluka, in which cholera carried off 19 persons or 0·94 per 1,000. No deaths, were attributed to small-pox whilst the death-rate (4·00) from fevers was the lowest in the Collectorate. No death from bowel-complaints was recorded during the year. The death-rates from injuries and other causes were respectively 0·34 and 0·69 per 1,000.

In the town of Karáchi the recorded death-rate from all causes was 24·54 per 1,000. Only 1 death was recorded from cholera and 7 from small-pox, the respective death-rates being 0·02 and 0·10 per 1,000. From fevers the death-rate was 10·90. The death-rate (1·08 per 1,000) from bowel-complaints was the highest in the Collectorate. From injuries the death-rate was 0·31 and from other causes the rate (12·13 per 1,000) was the highest in the Collectorate.

The recorded birth and death rates in this town in 1884 as compared with 1883 were as follows:—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Karáchi	47·90	46·64	25·19	24·54

The registration of births is very carefully carried out in Karáchi, but that of deaths appears to be inaccurate; in the tálukas the registration of vital statistics is much neglected.

Hyderabad.

45. The Collectorate of Hyderabad is divided into 1 town and 13 rural circles. It contains 1,105 towns and villages and covers an area of 9,030 square miles. The population of the Collectorate is 754,624 and the average density per square mile amounts to 83·57 persons. Amongst the rural circles the birth-rates in the tálukás of Hyderabad, Hála, Mirpur Khás, Kandiaro, Nausháhro, Moro and Sakrand are higher than the death-rates. In the remaining 6 tálukás the birth-rates are lower than the death-rates. In Kandiaro and Moro tálukás the birth-rates (33·84) and (30·42) are much higher than the death-rates (19·75) and (20·95) respectively, which shows how inaccurately the deaths are registered. The town of Hyderabad has a birth-rate (24·56) slightly higher than the death-rate (23·90).

The total number of deaths from all causes in 1884 amounted to 11,897, the death-rate being 15·77 per 1,000 against 14·47 in 1883 and the decennial mean of 11·87.

The maximum monthly mortality (1,779) took place in November and the minimum (494) in July.

Cholera commenced in October, attained its maximum intensity in November and continued till December; 192 deaths were ascribed to it, the death-rate being 0·25. Small-pox prevailed throughout the year to a great extent and caused 750 deaths or 0·99 per 1,000 against 500 or 0·66 in 1883, the decennial mean being 0·19. The death-rate (13·13 per 1,000) from fevers was above the decennial mean (9·91) and the rate in 1883 (12·18), the death-rate from bowel-complaints being 0·09 per 1,000 against 0·13 in 1883 and the decennial mean of 0·11.

The following statement shows the number of births and the deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate,

and compares the Zilla rate with that of 1883 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-Complaints. Number.	Bowel-Complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
HYDERABAD.	Hyderabad Rural Circle.	57,830	404	143·14	Information not available in the Census Report.	22	·38	53	·92	887	15·34	7	·12	23	·40	29	·50	1,021	17·66	1,167	20·18
	Gupi "	71,162	989	71·95		37	·52	72	1·01	570	8·01	5	·07	38	·53	43	·60	765	10·75	487	6·84
	Badla "	65,708	795	82·65		33	·50	33	·50	450	6·85	..	..	40	·61	28	·43	584	8·89	483	7·35
	Tando Bágo "	55,473	709	78·24		15	·27	15	·27	342	6·17	1	·02	8	·14	11	·20	392	7·07	319	5·[illegible]
	Dero Mohbat "	37,200	670	55·61		12	·32	93	2·50	563	15·11	11	·30	17	·46	33	·89	729	19·57	627	16·83
	Hála "	78,149	531	147·17		..	..	98	1·25	619	7·92	1	·01	28	·36	27	·35	773	9·89	837	11·11
	Tando Alahyár "	66,126	697	94·87		..	..	117	1·77	872	13·19	1	·02	41	·62	29	·44	1,060	16·03	988	14·94
	Shahdádpur "	55,593	738	75·34		..	..	65	1·17	940	16·90	24	·43	25	·45	25	·45	1,079	19·40	964	17·34
	Mirpur Khás "	24,979	561	44·53		..	..	9	·36	252	10·09	1	·04	19	·76	13	·52	294	11·77	324	12·97
	Kandiáro "	39,838	315	124·87		..	..	..	..	735	18·69	15	·38	23	·58	4	·10	777	19·75	1,331	33·84
	Naushahro "	61,295	532	115·22		5	·08	12	·20	1,177	19·20	1	·02	41	·67	34	·55	1,270	20·72	1,594	26·00
	Moro "	44,443	704	63·13		5	0·11	47	1·06	839	18·88	..	..	18	·41	22	·49	931	20·95	1,352	30·42
	Sakrand "	52,075	1,390	37·46		..	..	125	2·40	933	18·86	2	·04	26	·50	7	·13	1,142	21·93	1,174	22·54
	Hyderabad Town Circle.	45,195	..	..	1	63	1·39	11	0·24	671	14·85	1	0·02	12	0·27	322	7·13	1,080	23·90	1,110	24·56
	1884 ..	754,624	9,030	83·57	1,105	192	·25	750	·99	9,899	13·13	70	·09	359	·48	627	·83	11,897	15·77	12,757	16·91
					1883 ..	..	..	500	·66	9,188	12·18	98	·13	453	·60	683	·91	10,922	14·47	12,010	15·92
					Mean for 10 years, 1874—1883 ..	143	·20	135	·19	7,232	9·91	81	·11	479	·65	593	·81	8,684	11·87	6,566	8·97

N. B.—The area of the town of Hyderabad is included in Hyderabad Táluka, as it is not separately shown in the Census Report.

Amongst the rural circles the highest death-rate from all causes (21·93) took place in Sakrand Táluka. No death was ascribed to cholera; 125 deaths from small-pox were registered during the year, the death-rate being 2·40 per 1,000. The death-rate from fevers was 18·86, whilst the rate from bowel-complaints was 0·04. The death-rate from injuries was 0·50 and from other causes 0·13 per 1,000.

The lowest death-rate (7·07 per 1,000) was recorded in Tando Bágo Táluka in which cholera carried off 15 persons or 0·27 per 1,000. From small-pox the death-rate was 0·27 per 1,000, whilst the death-rate (6·17) from fevers was the lowest reported in the Collectorate. From bowel-complaints only 1 death was registered during the year, the rate being 0·02. The death-rates from injuries and other causes were respectively 0·14 and 0·20 per 1,000.

The death-rate from all causes (23·90) in the town of Hyderabad was the highest in the Collectorate, in which cholera carried off 63 persons. The death-rate (1·39) was the highest in the Collectorate. Small-pox caused 11 deaths, whilst the death-rate from fevers was 14·85. Only one death from bowel-complaints was registered during the year, the death-rate being 0·02. From injuries the death-rate was 0·27 whilst the rate (7·13) from other causes was the highest in the Collectorate.

The recorded birth and death-rates in this town in 1884 as compared with 1883 were as follows :—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Hyderabad ...	23·59	24·56	28·36	23·90

The registration of vital statistics is much neglected throughout the Collectorate.

Thar and Párkar.

46. The Collectorate of Thar and Párkar is divided into 7 rural and 1 town circles. It contains 73 towns and villages and covers an area of 12,729 square miles. The population of the Collectorate is 203,344 and the average density per square mile amounts to 15·98 persons. With the exception of tálukás Khipra and Sánghar, in which the birth-rates (11·54 and 11·38 respectively) are slightly below the death-rates (12·54 and 12·18), the birth-rate in each táluka is higher than the death-rate. In Cháchra and Nagar tálukás the birth-rates (30·45) and (34·63) are more than double the death-rates (14·60) and (16·39) respectively. In the táluka of Dipla the birth-rate (43·24) is considerably higher than the death-rate (22·15.) In the town of Umarkot the birth-rate (21·22) is much below than the death-rate (29·70.)

The total number of deaths from all causes in 1884 was 3,163, the death-rate being 15·55 per 1,000 against 19·16 in 1883, and a decennial mean of 13·60.

The maximum monthly mortality (391) took place in March and the minimum (160) in July.

There was no death from cholera during the year. Small-pox caused 53 deaths, or 0·26 per 1,000 against 0·06 in 1883 whilst the death-rate (13·99) for fevers was above the decennial mean 12·17. The death-rate from bowel-complaints was 0·15 per 1,000 against 0·04 in 1883 and a decennial mean of 0·17.

The following statement shows the number of births and the deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate and compares the Zilla rate with that of 1883 and the mean of the previous 10 years:—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-Complaints. Number.	Bowel-Complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000
Thar and Párkar.	Umarkot Rural Circle.	38,807	1,107	62·52	Information not obtainable in the Census Report.	..	..	11	·28	522	13·45	5	·13	15	·39	24	·62	577	14·87	618	15·93
	Cháchra ,, ..	37,046				..	..	2	·05	502	13·55	4	·11	17	·46	16	·43	541	14·60	1,128	30·45
	Nagar ,, ..	37,512	8,508	9·08		..	..	6	·16	576	15·35	6	·16	19	·51	8	·21	615	16·39	1,299	34·63
	Mitti ,, ..	22,611				..	..	..	..	348	15·39	7	·31	13	·57	12	·53	380	16·80	625	27·64
	Dipla ,, ..	17,114				..	..	3	·18	310	18·12	4	·23	11	·64	51	2·98	379	22·15	740	43·24
	Khipra ,, ..	26,679	3,114	15·23		..	..	15	·58	287	11·00	3	·12	11	·42	11	·42	327	12·54	301	11·54
	Sánghar ,, ..	21,347				..	..	16	·75	225	10·54	..	..	5	·23	14	·66	260	12·18	243	11·38
	Umarkot Town Circle.	2,828	..	..	1		..	..	..	74	26·17	1	0·35	1	0·35	8	2·83	84	29·70	60	21·22
	1884 ..	203,344	12,729	15·98	73	..	..	53	·26	2,844	13·99	30	·15	92	·45	144	·71	3,163	15·55	5,014	24·66
	1883 ..					..	..	13	·06	3,630	17·85	8	·04	101	·50	144	·71	3,896	19·16	5,878	28·91
	Mean for 10 years, 1874—83 ..					20	·11	10	·05	2,282	12·17	32	·17	85	·45	122	·65	2,551	13·60	3,227	17·21

N.B.—The area of the town o Umarkot is included in Umarkot and Cháchra Tálukas as it is not separately shown in the Census Report

Amongst the rural circles the highest death-rate from all causes (22·15) took place in Dipla Táluka in which 3 deaths or 0·18 per 1,000 from small-pox were registered during the year. The death-rate (18·11) for fevers was the highest among the rural registration circles. From bowel-complaints the death-rate was 0·23 and from injuries 0·64, which is the highest in the Collectorate. The death-rate from other causes (2·98 per 1,000) was the highest in the Collectorate.

The lowest reported death-rate (12·18), which is nearly the same as that of Khipra Táluka (12·54), occurred in Sánghar Táluka in which small-pox caused 16 deaths. The death-rate (0·75 per 1,000) was the highest in the Collectorate. From fevers the death-rate (10·54) was lowest in the Collectorate. No death was reported from bowel-complaints, whilst the death-rate (0·23) from injuries was the lowest in the Collectorate. From other causes the rate was 0·66.

In Khipra Táluka the death-rate from small-pox was 0·58 per 1,000 and from fevers 11·00. From bowel-complaints 0·12 and from injuries and other causes 0·42 per 1,000 each. These figures prove how inaccurate the registration is.

The death-rate from all causes (29·70) in the town of Umarkot was the highest in the Collectorate. No death was reported from small-pox, whilst the death-rate (26·17) from fevers was the highest in the Collectorate. From bowel-complaints and injuries there was only 1 death from each. The death-rate from other causes (2·83 per 1,000) was the next highest in the Collectorate.

The recorded birth and death rates in this town in 1884 as compared with 1883 were as follows:—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Umarkot	15·91	21·22	33·95	29·70

The registration of vital statistics is much neglected throughout the Collectorate.

Shikárpur.

47. The Collectorate of Shikárpur is divided into 15 rural and 3 town circles. It contains 1,373 towns and villages and covers an area of 10,001 square miles. The population of the Collectorate is 852,986 and the average density per square mile amounts to 85·29 persons. In 12 out of 15 rural circles the birth-rate is higher than the death-rate. In the tálukás of Ubauro, Lárkhána and Kambar, the birth-rate is lower than the death-rate. Amongst the urban circles the birth-rate in each, out of 3 towns, is lower than the death-rate.

The total number of deaths from all causes in 1884 amounted to 16,217, the death-rate being 19·01 per 1,000 against 15·77 in 1883 and a decennial mean of 11·58.

The maximum monthly mortality (3,565) took place in October and the minimum (625) in April.

Cholera commenced in October, attained its maximum intensity in the same month, and continued till December; 659 deaths were ascribed to it. The death-rate (0·77) was much above the mean of the previous 10 years (0·17). There were 28 deaths from small-pox against 4 in 1883, the death-rate being 0·03 per 1,000 against none in 1883 and a decennial mean of 0·16. The death-rate (17·00) from fevers was above the mean (10·19). The rate from bowel-complaints was 0·35 per 1,000 against 0·21 in 1883 and a decennial mean of 0·25.

The following statement shows the number of births and the deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate and compares the Zilla rate with that of 1883 and the mean of the previous 10 years:—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Shikárpur.	Shikárpur Rural Circle	32,616	47,750	68·30	Information not obtainable in the Census Report.	39	1·19	..	..	514	15·77	1	·03	18	·55	1	·03	573	17·57	595	18·24
	Sukkur „ ..	51,238	284	180·41		50	·98	3	·06	1,349	26·33	11	·21	26	·51	7	·14	1,446	28·22	1,753	34·21
	Naushahro „ ..	55,728	402	138·62		42	·75	..	..	890	15·97	13	·23	17	·31	8	·14	979	17·41	989	17·75
	Rohri „ ..	68,582	1,550	44·25		180	2·62	..	..	1,298	18·93	36	·52	23	·34	20	·29	1,557	22·70	1,918	27·97
	Ghotki „ ..	61,502	554	111·01		4	·07	..	..	1,065	17·32	1	·02	32	·52	5	·08	1,107	18·00	1,921	31·23
	Mirpur „ ..	39,112	1,721	22·73		..	..	..	..	548	14·01	1	·03	11	·28	4	·10	564	14·42	592	15·14
	Ubauro „ ..	39,918	450	88·71		..	..	..	..	408	10·22	2	·05	9	·23	6	·15	425	10·65	415	10·40
	Lárkhána „ ..	83,952	291	288·49		171	2·04	1	·01	1,206	15·44	12	·14	35	·42	..	..	1,515	18·05	1,066	12·70
	Kambar „ ..	91,539	976	93·79		..	..	..	..	1,372	14·99	26	·28	23	·25	29	·32	1,450	15·84	1,305	14·26
	Rato-dero „ ..	59,950	420	142·74		34	·57	1	·02	781	13·03	..	..	12	·20	13	·22	841	14·03	985	16·43
	Labdárya „ ..	33,088	207	159·84		35	1·06	..	..	592	17·89	3	·09	16	·48	10	·30	656	19·83	776	23·45
	Mehar „ ..	24,577	282	87·15		..	..	2	·08	702	28·56	12	·49	29	1·18	18	·73	763	31·05	1,086	44·19
	Kakar „ ..	49,500	598	82·78		..	.	13	·26	831	16·79	21	·42	50	1·01	5	·10	920	18·59	1,014	20·48
	Tigar „ ..	31,965	301	106·19		1	·03	2	·06	475	14·86	6	·19	15	·47	3	·09	502	15·70	902	23·22
	Nasirabad „ ..	46,278	343	134·92		..	..	3	·06	729	15·75	79	1·71	20	·43	6	·13	837	18·09	847	18·30
	Shikárpur Town Circle	42,496	9·50	4473·26	1	..	..	2	·05	771	18·14	20	·47	20	·47	48	1·13	861	20·26	720	16·94
	Sukkur „ ..	27,389	..	..	1	102	3·72	1	·04	453	16·54	47	1·72	24	·88	92	3·36	719	26·25	543	19·82
	Lárkhána „ ..	13,188	..	..	1	1	·08	..	..	426	32·30	6	·45	7	·53	71	5·38	511	38·75	478	36·24
	Travelling Population..	368	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1884 ..	852,986	10,001	85·29	1,373	659	·77	28	·03	14,500	17·00	297	·35	387	·45	346	·41	16,217	19·01	17,905	20·99
	1883 ..					..	..	4	..	12,541	14·70	181	·21	364	·43	360	·42	13,450	15·77	15,865	18·60
	Mean for 10 years, 1874—1883 ..					136	·17	129	·16	8,147	10·19	200	·25	314	·39	331	·41	9,257	11·58	8,312	10·40

N. B.—The areas in square miles of the towns of Sukkur and Lárkhána are included in their respective tálukás as they are not separately shown in the Census Report The total area of the Collectorate includes the area of the Kohistán hills which is 1,135 square miles.

Amongst the rural circles the highest death-rate from all causes (31·05) took place in Mehar Táluka, in which no death from cholera is reported and only 2 deaths were ascribed to small-pox, the death-rate being 0·08. The death-rate (28·56) from fevers was the highest among the rural registration circles. From bowel-complaints the death-rate was 0·49, whilst the death-rate (1·18) from injuries was the highest in the Collectorate. The death-rate (0·73 per 1,000) from other causes was the highest among the rural circles.

The next highest death-rate (28·22) is found in Sukkur Táluka in which cholera carried off 50 persons or 0·98 per 1,000. Small-pox caused 3 deaths, whilst the death-rate from fevers was 26·33. The death-rate from bowel-complaints was 0·21 and that from injuries 0·51 per 1,000. From other causes the death-rate was 0·14.

The death-rate from all causes (10·65) in Ubauro Táluka was the lowest in the Collectorate, in which there were no deaths from cholera or small-pox. The death-rate (10·22 per 1,000) from fevers was the lowest in the Collectorate. From bowel-complaints and injuries the death-rates were respectively 0·05 and 0·23, and from other causes 0·15.

Amongst the town circles the highest death-rate from all causes (38·75) in the town of Lárkhána was the highest in the Collectorate. There was only one death from cholera and none from small-pox, whilst the death-rate (32·30) from

fevers was the highest in the Collectorate. From bowel-complaints and injuries the death-rates were respectively 0·45 and 0·53 per 1,000. The death-rate (5·38) from other causes was the highest in the Collectorate.

The lowest death-rate (20·26) occurred in the town of Shikárpur, in which no deaths from cholera were reported but 2 from small-pox. The death-rate from fevers was 18·14 per 1,000, whilst the rate from bowel-complaints and injuries was the same, 0·47 each. From other causes the death-rate was 1·13 per 1,000.

The highest death-rate (3·72) from cholera in the Collectorate was in Sukkur town, in which the death-rate from fevers was 16·54 per 1,000, whilst the death-rate (1·72 per 1,000) from bowel-complaints was the highest in the Collectorate.

The recorded birth and death rates in each town in 1884 as compared with 1883 were as follows :—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Shikárpur	19·04	16·94	17·32	20·26
„ Sakkar	13·69	19·82	20·59	26·25
„ Lárkhána	28·89	36·24	31·24	38·75

The registration of vital statistics at Lárkhána appears to be carefully carried out. Among the tálukás Mehar is the only one where attention appears to have been paid to the subject.

Upper Sind Frontier.

48. The Collectorate of Upper Sind Frontier is divided into 3 rural and 1 town circles. It contains 143 towns and villages and covers an area of 2,139 square miles. The population of the Collectorate is 124,181 and the average density per square mile amounts to 58·05 persons. The recorded birth-rate in each táluka is higher than the death-rate. In Jacobabad Táluka the birth-rate (21·33) is considerably higher than the death-rate (11·17). In the town of Jacobabad the birth-rate (18·50) is lower than the death-rate, (23·26 per 1,000).

The total number of deaths from all causes amounted to 1,992, the death-rate being 16·04 per 1,000 against 9·19 in 1883 and a decennial mean of 8·69.

The maximum monthly mortality (461) took place in November and the minimum (86) in May.

Cholera commenced in October and disappeared in December after causing 107 deaths. From small-pox there were 6 deaths, the death-rate being 0·50 per 1,000 against none in 1883 and a decennial mean of 0·17. The death-rate (14·12 per 1,000) from fevers was above the decennial mean (7·23) and the rate in 1883 (8·47). The death-rate from bowel-complaints was 0·39 per 1,000 against 0·23 in 1883 and a decennial mean of 0·30.

The following statement shows the number of births and the deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the Zilla rate with that of 1883 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-Complaints. Number.	Bowel-Complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.	Births. Number.	Births. Ratio per 1,000.
Upper Sind Frontier.	Jacobabad Rural Circle.	25,972	455	57·08	Information not obtainable in the Census Report.	..	..	1	·04	278	10·70	..	..	6	·23	5	·19	290	11·17	554	21·33
	Thul ,, ..	43,025	821	52·41		22	·51	..	..	527	12·25	..	..	6	·14	3	·07	558	12·97	789	18·34
	Kashmor ,, ..	43,832	863	50·79		85	1·94	4	·09	742	16·93	25	·57	12	·27	12	·27	880	20·07	935	21·33
	Jacobabad Town Circle.	11,352	..	..	1	..	..	1	0·09	206	18·15	23	2·03	2	0·17	32	2·82	264	23·26	210	18·50
	1884 ..	124,181	2,139	58·05	143	107	·86	6	·05	1,753	14·12	48	·39	26	·21	52	·42	1,992	16·04	2,488	20·03
	1883 ..					..	..	..	..	1,051	8·47	28	0·23	23	·18	39	·31	1,141	9·19	2,197	17·69
	Mean for 10 years, 1874—1883 ..					10	·10	17	·17	725	7·23	30	·30	35	·35	54	·54	871	8·69	958	9·56

N. B. The area of the town of Jacobabad is included in Jacobabad Táluka as it is not separately shown in the Census Report.

Amongst the rural circles the highest death-rate from all causes (20·07 per 1,000) took place in Kashmor Táluka in which cholera caused 85 deaths. The death-rate (1·94) was the highest in the Collectorate. Small-pox caused 4 deaths, the death-rate being 0·09 per 1,000, whilst the death-rate (16·93) from fevers was the highest among the rural registration circles. From bowel-complaints the death-rate was 0·57 per 1,000, whilst the rate (0·27) from injuries was the highest in the Collectorate. The death-rate from other causes was 0·27.

The lowest death-rate (11·17) occurred in Jacobabad Táluka, in which no death from cholera was reported and only one from small-pox, the death-rate being 0·04 per 1,000. From fevers the death-rate (10·70) was the lowest in the Collectorate. There was no death recorded during the year from bowel-complaints. The death-rates from injuries and other causes were respectively 0·23 and 0·19 per 1,000.

The highest death-rate from all causes (23·26) in the Collectorate is found in Jacobabad town, in which there was no death from cholera but only one from small-pox, the death-rate being 0·09. The death-rate (18·15) from fevers was the highest in the Collectorate. From bowel-complaints, the death-rate (2·03) was also the highest in the Collectorate, the death-rate from injuries being 0·17, whilst the death-rate (2·82) from other causes was the highest in the Collectorate.

The recorded birth and death-rates in this town in 1884 as compared with 1883 were as follows :—

	Recorded Birth-rate.		Recorded Death-rate.	
	1883.	1884.	1883.	1884.
Town of Jacobabad	13·13	18·50	13·83	23·26

The registration of vital statistics is much neglected throughout the Collectorate.

Birth and death-rates compared by Collectorates.

49. As regards the Collectorates generally, in the City of Bombay the birth-rate was much below the death-rate, 18·59 and 28·82 per 1,000 respectively. This is clearly due, as already noticed, to defective registration. In the Collectorates of Kánara and Broach the recorded birth-rates in 1884 were slightly below the recorded death-rates. In the former the recorded birth-rate was 29·22 and the death-rate 30·01 per 1,000, and in the latter they were respectively 35·03 and 35·15. In all other Collectorates the recorded birth-rates are higher than the recorded death-rates. This is especially noticed in the following Collectorates:—

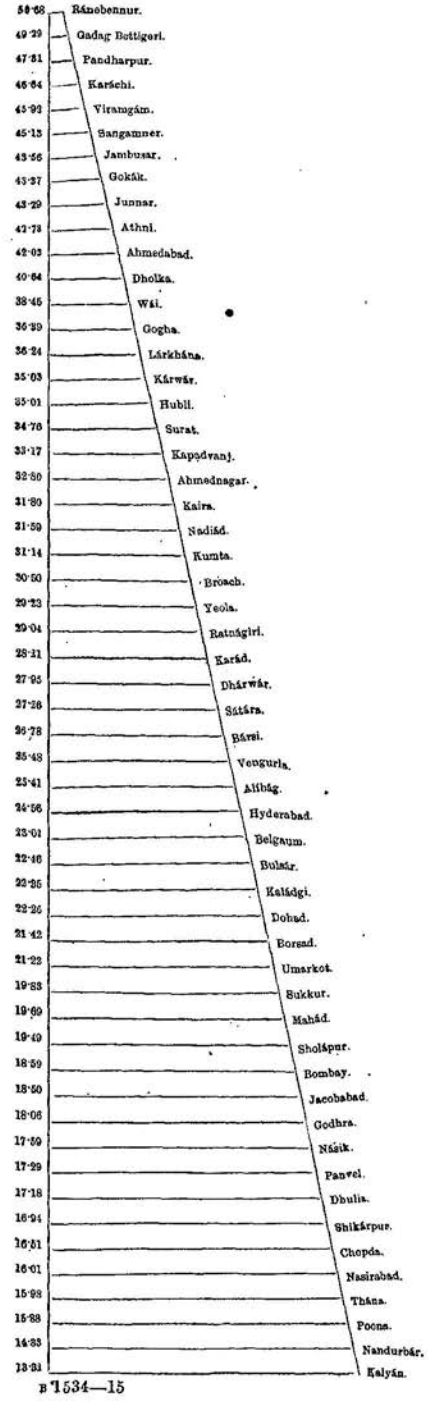
Collectorates.	Birth-rate, 1884.	Death-rate, 1884.
Khándesh	36·51	21·73
Ahmednagar	40·65	25·49
Poona	34·13	23·68
Sholápur	39·87	25·04
Sátára	42·81	26·61
Kaládgi	38·91	25·57
Panch Maháls...	34·94	19·50

But this does not prove that the public health was good in these Collectorates but only that the registration of deaths is not properly carried out.

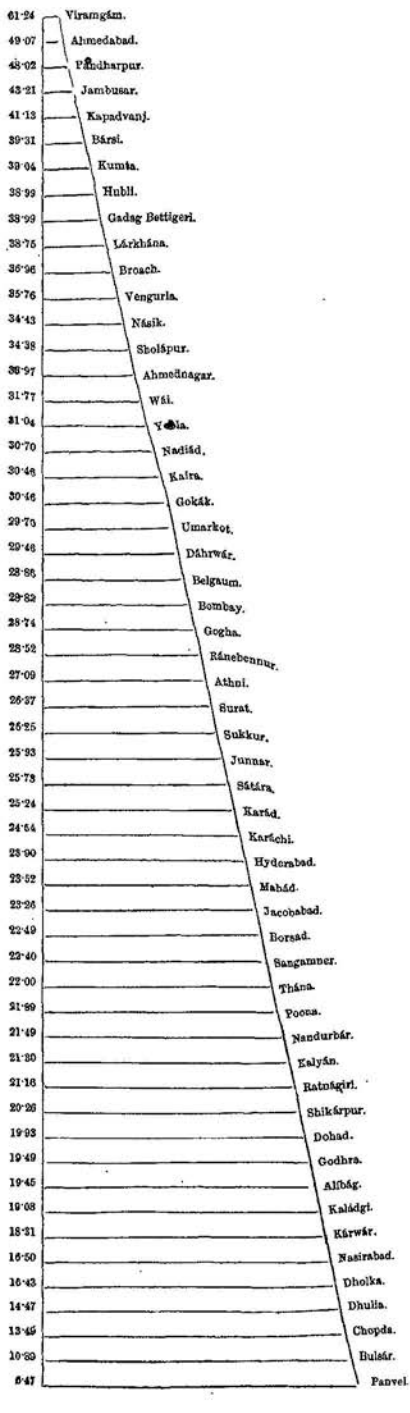
Birth and death-rates in sequence in towns.

50. It may be useful to show side by side the birth and death-rates in sequence in the town circles of this Presidency in order to invite the especial attention of Government to the high death-rate that has taken place in some of them and the miserably low birth-rate which has been recorded in others:—

Birth-rate per 1,000.



Death-rate per 1,000.



As regards births it will be seen that a high birth-rate is not confined to any particular part of the Presidency as we find a birth-rate of 50·68 per 1,000 of population registered in Ránebennur, a town in the most southern part of the Presidency in the Dhárwár Collectorate, whilst at Pandharpur in the Sholápur Collectorate there was a birth-rate of 47·31 and at Karáchi in Sind a birth-rate of 46·64, whilst at Viramgám in Gujarát a birth-rate of 45·92 per 1,000 was registered. The above results observed in widely separated parts of the Presidency go far to prove that the normal birth-rate of the civil population is not under 45 per 1,000. If a high birth-rate had been observed only in the districts which had been ravaged by famine it might have been thought that it was due to the great physiological law that famine is followed by a high birth-rate, but it will be seen that a high birth-rate is also found in Sind and Gujarát where there was no famine, and I am inclined to think that no birth-rate under 45 per 1,000 of population is correct. If this be so, it is evident that the registration of births in the greater part of the Presidency is very inadequately performed.

As regards deaths it is lamentable to find that Viramgám had during 1884 the extremely high death-rate of 61·24 per 1,000. Only 27 deaths from cholera and 12 from small-pox occurred during the year; so that epidemic causes will not account for the high death-rate in this town; but the fever death-rate was the extremely high one of 42·60 per 1,000, whilst that from bowel-complaints was no less than 12·48 per 1,000. So that from these 2 diseases alone 55·08 per 1,000 of the death-rate is accounted for. The cause of this great mortality is undoubtedly to be found in the entire absence of any proper sanitary arrangements. I have lately received from the Deputy Sanitary Commissioner, Eastern Gujarát Registration District, an inspection report of this town, and although I am precluded by the orders of Government from publishing it, the following extract will show how shamefully sanitation has been neglected and how it has retrograded during the last few years.

Dr. Colah says. "The following is the comparison of the present state of the town to what it was in 1878:—

1878.	1884.
(1). The sweepings were carried out of the town in carts. For this purpose 2 carts were kept and the number was to be increased to 4.	(1.) No carts at all for carrying out town-sweepings which is supposed to be removed by basketfuls by the sweepers.
(2.) No collection of town-sweepings was permitted in the town, but all town-sweepings were used in filling up low ground round the town for the purpose of making a road.	(2.) Two huge collections in the town, of a very objectionable nature, of which one is in a thickly inhabited part of the town.
(3.) There were night-soil tank carts after the Bombay plan for the removal of all the liquid and solid products of the public privies. This system was to be perfected and improved upon.	(3.) No such provision now. The filthy slush of the privies is supposed to be removed in earthen *garrás* and carried out on the top of the heads by the Bhangis to the night-soil depôt.
(4.) During the fair season all the products of the privies were really carried away in the carts and run into trenched fields which were subsequently ploughed and cultivated. This was a trial experiment to be improved upon and perfected.	(4.) A depôt is fixed and all solid and liquid privy products are supposed to be carried there and thrown into deep pits, but in reality nothing of the sort actually occurs, and the privy products are disposed of by the Bhangis in an irregular manner, in places most convenient to them.

(5.) No improvement has occurred in the water-supply of the town. It remains much the same.

From this contrast it will appear clear that in the carrying out of the three most important and initial measures of sanitation the Municipality has fallen backwards considerably."

Dr. Colah points out that the cause of the high fever-rate is to be found in the fact that the rains during the past year were heavy and late and that the lower parts of the town were inundated. He recommends as an immediate measure that the surface drainage be improved and the low-lying localities round the town be filled in so as to prevent the accumulation of water.

He also points out the necessity for improving the water-supply. The high death-rate from bowel-complaints is certainly due to an impure water-supply. He recommends that as water must necessarily be used from the Gangásar tank that it be raised into filtering tanks placed on the top of the town wall and that much stricter supervision of the conservancy of the gathering ground of the tank be maintained, and that the Mahomedan cemeteries on the southern embankment of the tank be closed and provision made for them elsewhere, and that people be not allowed to wade into the tank for the purpose of fishing. He also insists that the Gusauriu tank be filled in and reclaimed. As regards surface-cleaning he notices that the rate of pay, Rs. 4 per mensem, which the sweepers receive, is very low and ought to be raised. Dust-bins ought to be placed in various parts of the city which should be cleaned twice a day and that not less than four carts should be employed for this purpose, that no town-sweepings should be any longer deposited inside the town limits but that they should be taken outside and deposited near the present night-soil depôt and that a separate cleansing establishment is urgently needed for the new town which has sprung up near the railway.

The state of the public privies is described as being most disgusting. They ought to be closed and fields outside the town should be selected as places for public resort, while the night-soil should be collected and carried to the depôt where it should be converted into a poudrette.

The present site used as a cremation ground should be given up and that a new site should be selected.

51. The table further shows how shamefully neglected the registration of deaths is in many of the towns.

In my opinion the registration of vital statistics will never be satisfactory until it is rendered compulsory by law, so that persons who are responsible for giving this information may be punished if they neglect to do their duty in this respect. In every Municipality there is a bye-law rendering this registration compulsory, but it is manifest that even in such a town as Poona it is a dead letter. I feel certain that the leaders of native thought would support the introduction of such a law, and if Government were pleased to signify its displeasure on any flagrant case of neglect being brought to its notice I feel sure that much good would result.

I think it should be a standing order that all bodies should be carried past a police station where they should be registered and be provided with a permit for disposal which would prevent the body being registered a second time; such permits should be collected at the funeral place and sent to the Municipal Office.

Statistics for Cantonment Bazárs in quasi-foreign territory.

52. The following table shows the births and deaths and their respective ratios per 1,000 of population among the civil population in those Cantonments which are situated in quasi-foreign territory. From this it will be seen that in 1884 the total number of births registered in these Cantonments during the year was 2,696 against 2,022 in 1883, the birth-rate being 27·86 per 1,000 of population against 20·90 in 1883. The birth-rate in 1884 in all the Cantonments except the Cantonments of Aden and Mehidpur is higher than it was in 1883:—

	1884.	1883.
Aden	6·49	6·39
Baroda	19·90	6·21
Bhúj	30·73	22·35
Deesa	21·25	10·74
Mehidpur	17·70	70·80
Mhow	39·55	26·21
Nimuch	37·82	20·18
Nasirabad	53·03	50·98
Rájkot	14·30	2·62

At Aden the reported birth-rate (6·49 per 1,000) is nearly the same as it was in 1883 (6·39), but at Mehidpur only 2 births were registered during the year. The population of this Cantonment is 113 persons as enumerated at the census of 1881, but it is believed that it is now less. The total number of deaths in these Cantonments during 1884 was 3,395, equal to a ratio of 35·09 per 1,000 against 2,726 or 28·17 per 1,000 of population in 1883. From cholera 25 deaths were recorded during the year against 9 in 1883 in the following stations:—

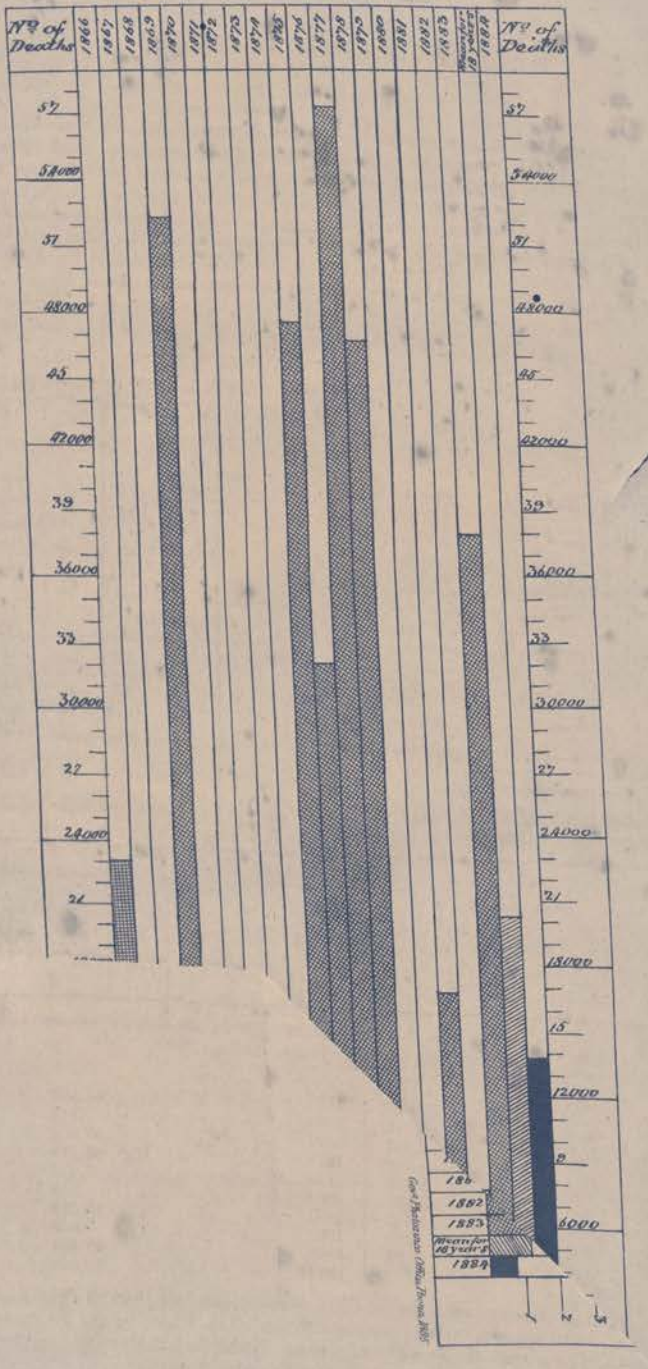
	1884.	1883.
Baroda	2	...
Deesa	4	1
Mhow	7	...
Nimuch	4	...
Nasirabad	8	8

From small-pox there were 10 deaths against 21 in 1883 and these were reported, 3 from Aden, 1 from Baroda, 2 from Mhow and 4 from Nasirabad. The deaths from fevers were 1,161 against 1,160 in 1883, and from bowel-complaints 359 against 309. Injuries caused 20 deaths against 29 in 1883, and the number from all other causes amounted to 1,820 against 1,198 in 1883.

Cantonments.	Civil Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Deaths.							Ratio per 1,000 of Population.							Births.	Ratio of Births per 1,000 of Population.
				Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other Causes.	Total.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other Causes.	Total.		
Aden	31,298	11	2,845·27	..	3	344	161	13	361	882	..	0·10	10·99	5·14	0·42	11·53	28·18	203	6·49
Baroda	2,412	1	2,412	2	1	39	2	..	15	59	0·83	0·41	16·17	0·83	..	6·22	24·46	48	19·90
Bhúj	358	1·04	344·23	..	..	3	..	..	1	4	..	..	8·38	..	..	2·79	11·17	11	30·73
Deesa	8,276	5	1,675·20	4	..	116	30	..	50	200	0·48	..	13·85	3·58	..	7·04	24·95	178	21·25
Mehidpur ..	113	2	56·50	..	..	10	..	..	..	10	..	..	88·49	..	..	..	88·49	2	17·70
Mhow	17,471	6·25	2,697·85	7	2	98	4	3	713	828	0·40	0·11	5·67	0·23	0·17	40·81	47·39	691	39·55
Nimuch ..	12,039	4·53	2,796·24	4	..	146	..	..	263	413	0·32	..	11·55	..	..	20·81	32·68	478	37·62
Nasirabad ..	10,122	8·00	2,390·37	8	4	395	161	4	397	969	0·42	0·21	20·66	8·42	0·21	20·76	50·67	1,014	53·03
Rájkot ..	4,965	Not	given.	..	..	9	1	..	11	21	..	..	1·81	0·20	..	2·22	4·23	71	14·30
Total ..	96,755	39·06	2,477·09	25	10	1,161	359	20	1,820	3,395	0·26	0·10	12·00	3·71	0·21	18·81	35·09	2,696	27·86

The registration of vital statistics in the Cantonment of Nasirabad is very well carried out and at Mhow and Neemuch it is very creditably performed. I hope the extremely high death-rate (50·67) at Nasirabad and the very high death-rates at Mhow (47·39) and at Neemuch (32·68) will attract the attention of the Military authorities and lead to the sanitary improvement of the sadar bázárs in those stations. At Rájkot the registration of vital statistics is very much neglected.

Diagram
Showing the mortality from Cholera in the Bombay Presidency during the 19 years ending 1884.



SECTION VI.

HISTORY OF CHIEF DISEASES.

CHOLERA.

Total mortality from cholera.

53. During 1884 cholera caused 13,804 deaths throughout the Presidency, or 24,150 less than in the preceding year. The epidemic, as will be seen from the subjoined table, was most severely felt in the Southern Registration District, as 8,534 of the total deaths were recorded in it, of which 4,655 took place in the Dhárwár Collectorate. Thar and Párkar Collectorate alone in the Sind District enjoyed perfect immunity from cholera, all the other Collectorates in the Presidency having been affected more or less during the year under report:—

Districts.		Collectorates.	Population according to Census of 1881.	Mean Mortality for 10 years from 1874 to 1883.		1883.		1884.	
				Number of Deaths.	Ratio per 1,000 of mean Population.	Number of Deaths.	Ratio per 1,000 of Population	Number of Deaths.	Ratio per 1,000 of Population
Western Registration District.	1	Khándesh	1,237,231	2,833	2·60	10,914	8·82	8	0·01
	2	Násik	781,206	1,212	1·62	4,193	5·36	76	0·10
	3	Thána	807,367	1,340	1·74	1,584	1·96	558	0·69
	4	Bombay (City)	773,196	699	1·02	1,014	1·31	568	0·73
	5	Kolába	482,830	773	1·76	1,114	2·31	627	1·30
Central Registration District.	6	Ahmednagar	751,228	2,147	2·80	7,368	9·81	24	0·03
	7	Poona	900,621	2,010	2·22	5,279	5·86	11	0·01
	8	Sholápur	582,487	1,455	2·15	2,544	4·37	31	0·05
	9	Sátára	1,062,350	2,219	2·09	1,209	1·14	99	0·09
	10	Ratnágiri	997,090	549	0·54	91	0·09	144	0·14
Southern Registration District.	11	Belgaum	854,024	2,396	2·61	479	0·55	2,701	3·12
	12	Dhárwár	882,907	2,011	2·10	23	0·03	4,655	5·27
	13	Kaládgi	638,493	1,748	2·29	1,008	1·58	1,070	1·68
	14	Kánara	421,840	386	0·95	1	0·00	108	0·26
Eastern Gujarát Registration District.	15	Surat	614,198	867	1·42	591	0·96	235	0·42
	16	Broach	328,930	317	0·92	88	0·27	607	1·86
	17	Kaira	804,800	597	0·76	282	0·35	396	0·49
	18	Panch Mahále	255,479	569	2·22	28	0·11	275	1·08
	19	Ahmedabad...	856,324	825	0·99	139	0·16	116	0·14
Sind Registration District.	20	Karáchi	478,688	122	0·23	..	..	517	1·03
	21	Hyderabad	754,624	143	0·19	..	..	192	0·25
	22	Thar and Párkar	203,344	23	0·11	..	..	..	..
	23	Shikárpur	852,986	136	0·17	..	..	659	0·77
	24	Upper Sind Frontier	124,181	10	0·10	..	..	107	0·86

ABSTRACT.

Western Registration District	4,081,830	6,862	1·83	18,819	4·61	1,837	0·45
Central ditto	4,293,776	8,380	1·89	16,491	3·84	309	0·07
Southern ditto	2,807,254	6,541	2·15	1,516	0·54	8,534	3·04
Eastern Gujarát ditto	2,857,731	3,175	1·12	1,128	0·39	1,949	0·68
Sind ditto	2,413,823	431	0·19	..	..	1,475	0·61
Total ..	16,454,414	25,389	1·56	37,954	2·31	13,804	0·84

Mortality for 19 years from 1866 to 1884 inclusive.

54. The total number of deaths from cholera in each of the 19 years ending with 1884 were as follows:—

1866	23,027	1875	47,555
1867	5,143	1876	32,117
1868	6,347	1877	57,252
1869	52,330	1878	46,743
1870	2,666	1879	6,937
1871	5,821	1880	684
1872	15,642	1881	16,694
1873	283	1882	7,904
1874	37	1883	37,954
		1884	13,804

so that the number of cholera deaths in 1884 were 24,150 less than in 1883 and 11,585 below the decennial mean; and was exceeded in 9 out of the 19 years above quoted. The annual distribution of these deaths and their ratios are for easy reference projected in the diagram on the opposite page.

55. The following table shows the monthly distribution of deaths from cholera in Sind during a period of 10 years ending 1883 and the results of 1884. I have shown the statistics of Sind separately, as its physical condition and therefore its epidemiological history differs from the rest of the Presidency. For example, in 1874, 1877, 1880, and 1881, or 4 years out of the ten included in the form, there was no cholera at all in Sind; and in 1875, with the exception of 42 deaths in the Karáchi Collectorate and 6 in Thar and Párkar, the remaining Collectorates were free. In 1876 there were 88 deaths in the Thar and Párkar Collectorate, but none in the other parts of the Province. In 1878 there were 26 deaths in the Thar and Párkar Collectorate, whilst the rest of Sind enjoyed complete immunity. In 1879 the disease was present throughout the District, but for the next 2 years there was no cholera in Sind, and in 1882 only 3 deaths occurred in Thar and Párkar:—

Mortality in Sind during 10 years ending 1883.

Number of Deaths from Cholera registered in each month in each Collectorate during 10 years 1874—1883.

Collectorates.	Average Population.	Number of Deaths from Cholera registered in each Month.												Total Number of Deaths.	Average annual Death-rate per 10,000 of Population.	Maximum Number of Deaths in any one of the 10 years.	Minimum Number of Deaths in any one of the 10 years.	Number of years in which the Death-rate exceeds 1 per 10,000.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.					
Karáchi	449,053	..	..	..	..	219	607	322	26	1	..	17	25	1,217	2·77	1,175	..	2
Hyderabad	731,750	..	..	..	..	380	909	144	..	..	..	..	..	1,433	1·96	1,433	..	1
Thar and Párkar	187,586	..	..	7	19	19	121	30	1	..	..	..	..	197	1·05	88	..	3
Shikárpur	799,255	..	..	..	..	204	675	183	37	95	184	23	..	1,359	1·70	1,359	..	1
Upper Sind Frontier... ..	100,244	..	..	..	..	8	85	6	..	..	..	..	..	99	0·99	99	..	1
Total ..	2,258,838	..	..	7	19	830	2,395	685	64	96	184	50	25	4,305	..	..	..	..
Average death-rate of each month per 10,000 of population		..	..	0·00	0·01	0·37	1·06	0·28	0·03	0·04	0·08	0·02	0·01	=1·90				
Percentage of deaths in each month ..		..	..	0·15	0·44	19·28	55·63	14·75	1·49	2·23	4·27	1·16	0·59	=100				
1884 ..		..	..	..	..	..	..	..	..	..	782	605	138	1,475				

The immunity from cholera which Sind, as a general rule, enjoys is of deep epidemiological interest, and I attribute it to a great degree to its extremely dry climate and the very light rainfall. It has only appeared in 2 years of the series in the Karáchi Collectorate, 1875 and 1879. In 1875 it appeared in November but died out in December. In 1879 it commenced in May, attained its maximum in June, and died out completely in September. In Hyderabad Collectorate, during the 10 years, it was only present in 1879. The disease commenced in May, attained its maximum in June and died out in July. Thar and Párkar Collectorate has suffered more severely than the rest of Sind, as the disease was present in 5 out of the 10 years. In 1875, 5 deaths were reported in June and 1 in July. The next year it began in May, continued in June and July, but died out in August. In 1877 there was no cholera, but in 1878 there were 7 deaths in March and 19 in April when it ceased. In 1879 there were 8 deaths in May and 66 in June but no more during the year, and since then with the exception of 3 deaths in May 1882, there was no more cholera in Thar and Párkar. In the Shikárpur Collectorate cholera was only present in one year, 1879, out of the 10 years. It commenced in May, attained its maximum intensity in June, but died out in November. In the Upper Sind Frontier also the disease only appeared in 1879. It commenced in May, attained its maximum in June, and died out in July, since which time it has been free. The disease broke out in the Shikárpur Collectorate on the 2nd October 1884; on the 14th it appeared in the Upper Sind Frontier Collectorate, on the 15th in the Karáchi Collectorate, and on the 19th in the Hyderabad Collectorate. Thar and Párkar escaped. In the Upper Sind Frontier Collectorate the disease ceased in November, and at the close of the year it had nearly disappeared from Shikárpur and Hyderabad, but still prevailed in the Karáchi Collectorate.

Mortality in the Presidency except Sind during 10 years ending 1883.

56. The next table shows the monthly distribution of the deaths from cholera for the remaining portion of the Presidency during the 10 years ending 1883, and the results for 1884:—

Collectorates.	Average Population.	Number of Deaths from Cholera registered in each Month.												Total Number of Deaths.	Average annual Death-rate per 10,000 of Population.	Maximum Number of Deaths in any of the 10 years.	Minimum Number of Deaths in any one of the 10 years.	Number of years in which the Death-rate exceeded 1 per 10,000.
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.					
Khándesh	1,091,219	17	..	11	26	1,703	4,432	10,797	9,654	1,554	78	75	28	28,385	26·01	10,914	..	7
Násik	748,432	..	44	27	1,159	2,544	2,049	1,665	2,172	1,581	739	121	22	12,123	16·19	4,193	..	9
Thána	771,781	280	330	334	270	1,902	3,571	3,859	3,636	1,066	550	313	340	16,251	21·06	5,969	..	8
Bombay	683,042	156	240	315	385	737	1,079	1,439	1,352	587	275	129	234	6,988	10·23	2,510	19	8
Kolába	453,758	132	139	36	32	121	952	975	1,572	584	185	72	136	4,817	10·75	1,453	..	8
Ahmednagar	767,125	9	6	53	255	1,620	5,101	7,654	4,129	1,844	613	128	55	21,467	27·99	7,368	..	7
Poona	905,251	652	163	217	751	3,396	5,823	4,101	2,642	996	342	201	230	20,104	22·28	5,279	2	9
Sholápur	677,370	174	158	22	254	1,752	1,480	6,103	3,185	813	234	231	119	14,555	21·49	3,536	..	7
Sátára	1,061,407	81	52	412	2,404	3,219	5,434	4,623	3,081	1,437	911	201	82	22,187	20·92	6,702	..	7
Ratnágiri	1,012,522	99	251	189	107	114	922	1,622	1,044	552	274	250	66	5,490	5·42	3,125	..	6
Belgaum	916,329	1,424	1,400	3,026	4,538	5,424	2,364	827	632	690	1,715	695	1,227	23,962	26·15	8,357	..	7
Dhárwár	956,498	2,195	2,775	4,065	3,125	1,990	1,210	447	380	477	1,227	920	1,301	20,112	21·03	5,779	..	5
Kaládgi	762,774	625	877	1,874	3,237	4,315	2,366	1,327	1,359	647	436	228	194	17,485	22·92	7,124	..	7
Kánara	405,456	239	330	614	646	317	209	376	415	235	189	164	123	3,857	9·51	2,804	..	4
Surat	609,220	111	150	149	333	971	2,233	1,678	1,191	566	338	370	79	8,669	14·23	2,751	4	7
Broach	343,304	2	5	96	173	490	1,166	734	258	138	54	31	7	3,154	9·19	1,027	..	6
Kaira	789,353	25	7	405	834	1,827	1,526	414	433	186	84	148	81	5,970	7·56	2,104	..	7
Panch Mahals	245,184	33	4	86	967	1,857	2,132	383	28	4	25	117	54	5,690	23·21	4,130	..	5
Ahmedabad	837,643	42	79	536	1,382	2,299	2,071	451	850	200	58	177	106	8,246	9·84	2,818	1	7
Total ..	14,037,623	6,246	7,031	12,427	20,878	37,098	46,220	49,585	38,018	14,157	8,772	4,661	4,484	2,49,572	..	..	..	..
Average Death-rate of each month per 10,000 of Population		0·45	0·50	0·88	1·49	2·64	3·29	3·53	2·71	1·01	0·63	0·33	0·32	=17·78				
Percentage of Deaths in each Month.		2·50	2·82	4·98	8·27	14·86	18·52	19·87	15·23	5·67	3·51	1·87	1·80	=100				
1884 ..		207	110	414	387	550	1,705	2,738	2,746	1,665	894	495	418	12,329				

It will be seen that with the advance of spring the disease assumes activity, and increasing in intensity month by month attains its maximum in July, but in August a considerable, and in September and October a decided fall in the mortality takes place; and the disease subsides until the minimum for the year is reached in December.

Monthly mortality for 1884.

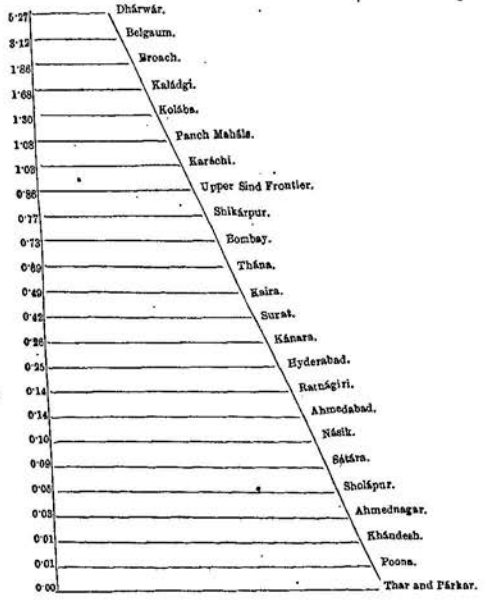
57. The following table represents the mortality from cholera in the affected Collectorates in each month of the year under report and the results are compared with 1883:—

Months.	1883.		1884.		Deaths by Collectorates during 1884.																						
	Number of Deaths.	Ratio per 1,000 of Population.	Number of Deaths.	Ratio per 1,000 of Population.	Khándesh.	Násik.	Thána.	Bombay City.	Kolába.	Ahmednagar.	Poona.	Sholápur.	Sátára.	Ratnágiri.	Belgaum.	Dhárwár.	Kaládgi.	Kánara.	Surat.	Broach.	Kaira.	Panch Mahals.	Ahmedabad.	Karachi.	Hyderabad.	Shikárpur.	Upper Sind Frontier.
January	28	..	207	0·01	..	..	5	99	86	..	..	..	..	3	7	..	6	..	..	1	..	..	..	..	..	..	..
February	1	..	110	0·00	..	1	10	32	28	..	..	..	..	30	..	..	1	..	..	8	..	..	..	..	..	..	..
March	18	..	414	0·03	..	4	57	33	129	..	..	..	..	24	..	5	..	..	6	156	..	..	..	..	..	..	..
April	936	0·06	387	0·02	..	44	6	7	106	..	..	..	2	12	..	6	..	..	131	72	..	1	..	..	..	..	..
May	5,622	0·34	550	0·03	..	11	27	70	1	20	..	..	4	2	..	55	..	..	106	168	76	3	5	..	..	..	..
June	9,447	0·58	1,705	0·10	..	..	70	19	4	4	..	..	..	..	91	1,158	1	..	8	158	115	63	14	..	..	..	..
July	12,708	0·77	2,738	0·17	..	..	16	8	30	..	1	..	..	38	416	1,733	84	6	..	43	139	144	30	..	..	..	..
August	6,783	0·41	2,746	0·17	..	1	21	73	190	..	..	..	22	17	944	1,023	397	13	..	..	15	63	27	..	..	..	..
September	1,230	0·08	1,665	0·10	..	6	73	92	91	..	..	..	53	9	598	443	248	11	..	1	..	1	39	..	..	..	..
October	605	0·04	1,626	0·10	5	8	88	46	14	..	5	15	11	3	319	179	195	..	2	..	..	..	1	88	79	529	35
November	340	0·02	1,100	0·07	..	1	66	49	..	..	5	12	7	4	169	52	129	1	..	..	..	..	..	301	107	126	71
December	146	0·01	656	0·04	..	..	119	40	8	..	..	4	..	2	157	1	9	77	..	..	1	..	..	128	6	4	..
Total ..	37,954	2·31	13,804	0·84	8	76	558	568	627	24	11	31	99	144	2,701	4,655	1,070	108	255	607	396	275	116	517	192	659	107

In 1884 the disease in the month of January prevailed to a slight extent in 7 Collectorates. In February the deaths fell to 110, but in March there were 414 deaths in 8 Collectorates. In April there was a slight decrease, but in May it had spread to 13 Collectorates and caused 550 deaths. In June the disease appeared to have assumed an epidemic form, as 1,705 deaths were registered in 12 Collectorates, 1,158 being in the Dhárwár Zilla. During July the mortality rose to the very serious amount of 2,738, the disease being present in 13 Collectorates, and in August 2,746 deaths, or the maximum for the year, were recorded. In September and October the disease began to abate, as there were 1,665 deaths in the former and 1,626 in the latter. From November a still further decline took place, as the mortality in this month amounted to 1,100. In December it fell considerably, as only 556 deaths were returned.

Death-rates by Collectorates.

58. The following diagram exhibits the death-rate from cholera per 1,000 of population in the affected Collectorates arranged in order of highest death-rate :—



Details of attacks and deaths and death-rates by Collectorates and by sexes.

59. The next statement shows the total number of registration circles and their populations arranged by Collectorates; the number of circles affected by cholera and the population living in each; the number of attacks reported from each Collectorate; the number of deaths; the death-rate arranged by sexes; the percentage of affected villages to total villages; and the percentage of deaths to attacks in each Collectorate. It also shows the percentage of the population living in the affected localities to total population; and percentages of attacks and deaths to population living in the affected area :—

Districts.		Collectorates.	Total number of Registration Circles and their Collective Population. Rural circles.	Town circles.	Cantonment circles.	Villages.*	Total population.	Number of circles affected by Cholera and the Population living in each. Rural Circles.	Town circles.	Cantonment circles.	Villages.	Population living in affected localities.	Attacks.	Deaths. Males.	Females.	Total.	Ratio of Deaths per 1,000 of Population. Males.	Females.	Total.	Percentage of affected Villages to Total Villages.	Percentage of Deaths to Attacks.	Percentage of the Population living in the affected Localities to Total of Collectorate.	Percentage of Attacks to Population lived in the affected Area.	Percentage of Deaths to Population lived on the affected Area.
Western Registration District.	1	Khándesh	22	4	..	2,679	1,237,231	1	..	..	1	5,282	20	2	6	8	..	0·01	0·01	0·04	40·00	0·43	0·38	0·15
	2	Násik	12	2	2	1,629	781,266	3	1	..	10	33,308	142	43	33	76	0·11	0·09	0·10	0·61	53·52	4·26	0·43	0·23
	3	Thána	10	2	..	1,880	807,367	9	1	..	64	78,339	870	290	278	558	0·67	0·71	0·69	3·40	64·14	9·70	1·11	0·71
	4	Bombay (City)	..	1	..	..	773,196	..	1	..	..	773,196	727	394	174	568	0·85	0·56	0·73	..	78·13	100·00	0·10	0·07
	5	Kolába	7	3	..	1,191	482,830	6	2	..	49	75,223	1,029	317	310	627	1·30	1·30	1·30	4·11	60·93	15·58	1·37	0·83
Central Registration District.	6	Ahmednagar	11	2	1	1,331	751,228	2	..	..	6	3,556	55	11	13	24	0·03	0·04	0·03	0·45	43·64	0·48	1·55	0·68
	7	Poona	8	2	2	1,181	900,621	2	1	1	2	132,691	18	5	6	11	0·01	0·01	0·01	0·17	61·11	14·73	0·01	0·01
	8	Sholápur	7	3	..	769	582,487	5	1	..	13	31,915	68	15	16	31	0·05	0·06	0·05	1·84	45·59	5·48	0·21	0·10
	9	Sátára	12	3	..	1,340	1,062,350	6	..	..	17	31,292	245	50	49	99	0·09	0·09	0·09	1·27	40·40	2·95	0·78	0·32
	10	Ratnágiri	8	2	..	1,296	997,090	4	1	..	21	51,609	300	68	76	144	0·14	0·15	0·14	1·62	48·00	5·17	0·58	0·28
Southern Registration District.	11	Belgaum	7	3	1	1,073	364,014	7	3	1	207	371,905	5,399	1,381	1,320	2,701	3·17	3·07	3·12	19·29	51·88	43·04	1·45	0·74
	12	Dhárwár	14	4	..	1,281	882,907	14	4	..	424	636,006	9,086	2,478	2,177	4,655	5·60	4·93	5·27	33·16	51·23	72·04	1·43	0·73
	13	Kaládgi	8	1	..	1,140	638,493	8	1	..	160	299,817	2,317	530	540	1,070	1·06	1·08	1·68	14·03	46·18	32·80	1·10	0·51
	14	Kánara	11	2	..	1,107	421,840	4	..	..	13	6,620	142	57	51	108	0·26	0·25	0·26	1·17	76·06	1·09	2·14	1·63
Gujarát Registration District.	15	Surat	8	2	..	780	614,198	7	2	..	21	163,008	439	138	117	255	0·45	0·37	0·42	2·69	58·09	26·54	0·27	0·16
	16	Broach	6	2	..	403	326,930	6	2	..	78	157,554	1,206	357	250	607	2·11	1·57	1·86	19·35	50·33	48·19	0·77	0·38
	17	Kaira	7	4	..	577	804,800	6	3	..	57	208,045	1,084	229	167	396	0·53	0·44	0·49	9·88	36·53	25·84	0·52	0·19
	18	Panch Mahals	5	2	..	673	255,479	5	2	..	35	68,634	640	147	128	275	1·12	1·02	1·08	5·20	42·97	26·87	0·90	0·40
	19	Ahmedabad	7	4	1	857	856,324	1	2	..	7	158,097	223	65	51	116	0·14	0·12	0·14	0·82	52·02	18·46	0·14	0·08
Sind Registration District.	20	Karáchi	13	1	..	722	478,688	10	1	..	96	426,068	751	303	214	517	1·10	1·00	1·03	13·30	68·84	50·89	0·18	0·12
	21	Hyderabad	13	1	..	1,104	754,624	7	1	..	45	438,366	242	121	71	192	0·30	0·20	0·25	4·08	79·34	58·09	0·06	0·04
	22	Thar and Párkar	7	1	..	72	203,344	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	23	Shikárpur	15	2	..	1,376	832,986	9	2	..	68	481,787	892	400	259	659	0·87	0·66	0·77	4·96	73·88	56·48	0·19	0·14
	24	Upper Sind Frontier	3	1	..	142	124,181	2	..	..	23	86,857	186	57	50	107	0·41	0·03	0·86	16·19	57·53	6·99	0·21	0·12
		Total	221	55	7	24,536	16,454,414	124	31	2	1,417	4,629,175	26,081	7,448	6,356	13,804	0·88	0·80	0·84	5·78	52·93	28·13	0·57	0·3

* In the Census Report the total number of villages and towns for the Presidency are respectively shown as 24,431 and 167 = 24,598, but for the purposes of registration 55 towns and 7 cantonments only have been selected and the rest (24,536) are considered as villages.

Cholera in the Presidency generally.

60. In the Presidency out of 13,804 deaths registered during the year 7,448 occurred among males and 6,356 among females; so for every 100 deaths among males there were 85 deaths among females. The ratio per mille of males dying to males living was 0·88, and of females dying to females living 0·80. Last year they were 2·34 and 2·27 respectively. The deaths among females exceeded those among males slightly in the Khándesh, Ahmednagar, Poona, Sholápur, Ratnágiri and Kaládgi Collectorates; whilst in the remaining 17 affected Zillas the reverse was the case.

Taking the mortality by Collectorates it will be seen that the highest number of deaths, 4,655 or 5·27 per 1,000 of population, as before noticed, took place in the Dhárwár Collectorate. Next in order comes the Belgaum Collectorate, where the deaths amounted to 2,701 or 3·12 per 1,000, and following it the Kaládgi Collectorate, where they were 1,070 or 1·68 per mille. In the Thána Collectorate, in the City of Bombay, in Kolába, Broach, Karáchi and Shikárpur Collectorates, the deaths ranged between 500 and 700, whilst in the remaining 14 Collectorates they were under 500.

Registration circles affected by cholera.

61. Out of 283 Registration Circles into which the Presidency is divided for registration purposes (221 rural, 55 town and 7 Cantonment circles) 157, namely 124 rural, 31 town and 2 Cantoment circles were affected with cholera.

The total cholera mortality was distributed over 1,450 registration units, *viz.*, 31 towns, 2 Cantonments and 1,417 villages. Out of the entire population (16,454,414) of the Presidency 4,629,175 persons or 28·13 per cent. were living in the affected localities. Of these 13,804 or 3 per 1,000 died. Out of 24,536 inhabited villages in the Presidency, 1,417 or only 5·78 per cent. were affected with cholera.

Mortality in rural circles.

62. The following statement shows, in order of precedence the rural circles, 11 in all, in which the deaths from cholera exceeded 4 per 1,000 of population, and that the disease principally prevailed in 7 circles of the Dhárwár Collectorate, in 2 of the Belgaum Collectorate, and in 2 of the Karáchi Collectorate :—

Number in Sequence.	Name of Tálukas or Rural Circles.	Name of Collectorates.	Population by Census of 1881.	Deaths from Cholera.	
				Number.	Ratio per 1,000 of Population.
1	Hubli	Dhárwár	55,320	532	9·62
2	Karajghi	"	83,216	627	7·53
3	Gadag	"	83,332	576	6·91
	Mandargi Petha				
4	Navalgund	"	87,832	581	6·61
	Nargund				
5	Sháhábandar	Karáchi	27,814	139	5·00
6	Dhárwár	Dhárwár	83,946	398	4·74
	Mugud Petha				
7	Sampgaon	Belgaum	119,843	521	4·35
8	Jatti	Karáchi	27,055	117	4·32
9	Chikodi	Belgaum	245,614	1,047	4·26
10	Ron	Dhárwár	60,724	259	4·26
11	Bankápur	"	76,554	315	4·11

The aggregate population living in the abovementioned rural circles amounted to 951,250 persons, among whom 5,112 deaths or more than a third of the total cholera mortality in the Presidency were recorded; so that one death occurred among every 186 inhabitants of these tálukás.

Urban mortality.

63. The following table shows the mortality from cholera in the 31 towns and 2 Cantonments which were affected and the death-rate in each as compared with the mean death-rate of the entire Collectorate in which it is situated :—

Collectorates.	Recorded Death-rate from Cholera in 1884.	Town and Cantonment Circles.	Recorded Death-rate from Cholera in 1884.
Násik	0·10	Násik Town Circle	1·33
Thána	0·69	Kalyán „ „	2·80
Bombay (City)	0·73	Bombay „ „	0·73
Kolába...	1·30	Mahád „ „	4·26
		Panvel „ „	0·19
Poona	0·01	Poona „ „	0·04
		Poona Cantonment Circle ...	0·03
Sholápur	0·05	Pandharpur Town „ ...	0·12
Ratnágiri	0·14	Vengurla „ „ ...	1·34
Belgaum	3·12	Belgaum „ „ ...	0·95
		Gokak „ „ ...	4·27
		Athni „ „ ...	0·45
		Belgaum Cantonment ...	1·04
Dhárwár	5·27	Dhárwár Town „ ...	5·22
		Hubli „ „ ...	12·71
		Gadag Bettigeri „ ...	7·82
		Ránebennur „ ...	0·59
Kaládgi	1·68	Kaládgi „ „ ...	0·71
Surat	0·42	Surat „ „ ...	0·97
		Bulsár „ „ ...	0·08
Broach	1·86	Broach „ „ ...	3·38
		Jambusar „ „ ...	0·35
Kaira	0·49	Kaira „ „ ...	0·08
		Borsad „ „ ...	3·03
		Kapadvanj „ ...	1·52
Panch Maháls	1·08	Godra „ „ ...	1·80
		Dohad „ „ ...	2·10
Ahmedabad	0·14	Ahmedabad „ ...	0·47
		Viramgám „ „ ...	1·42
Karáchi	1·03	Karáchi „ „ ...	0·01
Hyderabad	0·25	Hyderabad „ ...	1·39
Shikárpur	0·77	Sukkur „ „ ...	3·72
		Lárkhána „ „ ...	0·08

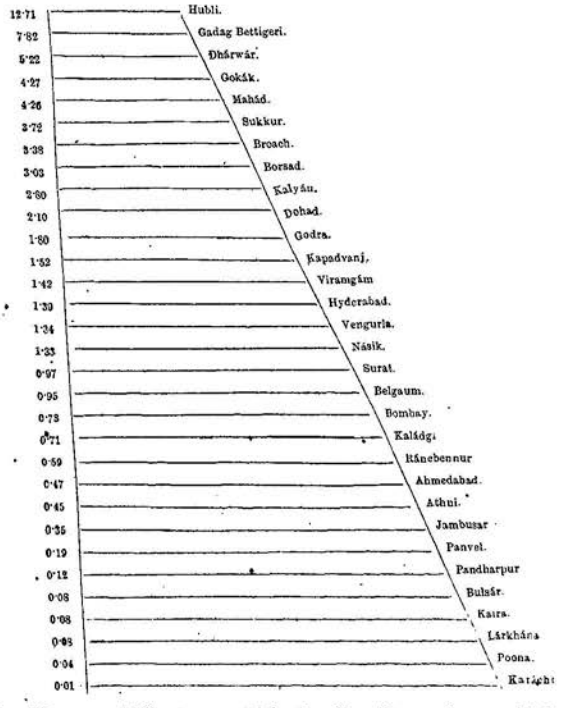
High mortality in towns.

64. The following towns suffered very severely from cholera in which the death-rate exceeded 1 per mille of population :—

Number in Square.	Name of Town.	Name of Collectorate.	Population of Town.	Death-rate per 1,000.
1	Hublí	Dhárwár	36,677	12·71
2	Gadag Bettigeri	Do.	17,001	7·82
3	Dhárwár	Do.	27,191	5·22
4	Gokak	Belgaum	10,307	4·27
5	Mahád	Kolába	6,804	4·26
6	Sukkur...	Shikárpur	27,389	3·72
7	Broach	Broach	37,281	3·38
8	Borsad	Kaira	12,228	3·03
9	Kalyán...	Thána	12,910	2·80
10	Dohad	Panch Maháls	12,394	2·10
11	Godhra	Do.	13,342	1·80
12	Kapadvanj	Kaira	14,442	1·52
13	Viramgám	Ahmedabad	18,990	1·42
14	Hyderabad	Hyderabad	45,195	1·39
15	Vengurla	Ratnágiri	8,947	1·34
16	Násik	Násik	24,101	1·33

All affected towns arranged in sequence.

65. The following statement represents the death-rate from cholera per 1,000 of population in the affected registration towns arranged in order of highest death-rate :—



Cholera in Civil Cantonments.

66. There are 7 Cantonments in the Presidency from which, as regards the civil population living in each, vital statistics are received, of which only 2 were affected during the year under notice namely :—

		Population.	Deaths.
Poona	... ...	30,129	1
Belgaum	... ...	9,582	10

Villages affected by cholera.

67. As before noticed, during the year, out of the 24,536 villages in the Presidency 1,417 or 5·78 per cent. were affected by cholera. In the Dhárwár Collectorate there are 1,281 villages, of which 421 or 33·10 per cent. were affected. In Belgaum out of 1,073 villages 207 or 19·29 per cent. were attacked, whilst in the Kaládgi Collectorate there were 160 out of 1,140 villages or 14·03 per cent. affected. In the Karáchi, Broach, Shikárpur, Thána and Kaira Collectorates the affected villages were 96, 78, 68, 64 and 57 respectively; whilst in the remaining 14 affected Collectorates they were below 50.

Collectorates in which cholera first appeared in *Towns* and those in which it first invaded *Villages*.

68. The following table shows the Collectorates in which cholera first appeared in *Towns* and those in which it first invaded *Villages* :—

Collectorates in which Cholera first appeared in *Towns*.			Collectorates in which Cholera first appeared in *Villages*.		
Collectorate.	Town.	Date of first Appearance.	Collectorate.	Village.	Date of first Appearance.
Násik	Násik	22nd February 1884.	Khándesh ...	Bedwad ...	10th October 1884.
Poona	City of Poona ...	5th July ,,	Thána	Datiwali ...	28th January ,,
Panch Mahále ...	Dohad	5th April ,,	Kolába ...	Ashtami ...	1st ,, ,,
Ahmedabad ..	Viramgám ...	16th May ,,		Khamb	
Hyderabad ...	Hyderabad ...	19th October ,,		Satwali	
			Ahmednagar ...	Washi	9th May ,,
			Sholápur ...	Gherdi	23rd October ,,
				Ashti	
			Sátára	Shenwadi ...	14th April ,,
			Ratnágiri ...	Ghosale... ...	8th January ,,
			Belgaum ...	Date	16th ,, ,,
				Wargaon ...	
			Dhárwár ...	Kasugal ...	19th March ,,
			Kaládgi... ...	Nanur	8th January ,,
			Kánara	Margadi ...	19th July ,,
			Surat	Morthan ...	22nd March ,,
			Broach	Ankleshvar ...	24th January ,,
			Kaira	Kherda	11th May ,,
			Karáchi... ...	Shah Hussan .	15th October ,,
			Shikárpur ...	Nandero ...	2nd October ,,
			Upper Sind Frontier.	Shahdádpur ...	14th October ,,

69. I shall next proceed to trace the course of the epidemic in each Collectorate.

Khándesh.

70. Had it not been for an outbreak of cholera that took place on the 10th October in Bedwad, a village of 5,282 inhabitants in the Bhusával Táluka, the district of Khándesh would have been exempt during the year under review. The outbreak in this village lasted for 16 days, the last case having occurred on the 26th October. There were altogether 20 attacks, 8 of which proved fatal.

Násik.

71. The first case of cholera in this Collectorate was reported from the town of Násik on the 22nd February. A woman who had gone to Násik from Bombay (her native place) on the 16th February was attacked with symptoms of cholera on the night of the 21st and died within 16 hours. In the last week of March the disease again appeared in Násik and 9 cases, 4 of which proved fatal, took place. "Of these 4 fatal cases" says the Honorary Surgeon at Násik, "only one received medicine from the Hospital. One of these four, a native of Násik, was attacked with the disease in Bombay on the 29th and returned to Násik next day, when he was in a state of collapse." As the great Sinhastha fair was to commence on the 27th August it was pointed out to the Collector that the use of the water from the river Godávari for drinking purposes should be discouraged, especially that from the bed of the river below the Tás and if possible below the ford between Gharpura and Dhangarwáda. The disease prevailed till the 15th April in this town, but at the same time it appeared afresh in 5 villages of the Igatpuri Táluka, 3 villages of the Násik Táluka, and 1 village of the Nándgaon Táluka. In May it ceased in the Násik Táluka but continued slightly in 3 other affected circles. By the end of May the disease disappeared from the Collectorate and no deaths from cholera were reported until the 29th of August, when there was a revitalization of the disease as a fatal case was again reported to have taken place in the town of Násik. In September it was present to a slight extent in Násik as well as in the small town of Trimbak in the Násik Táluka. In October it was confined to the town of Násik, and the last case occurred there on the 2nd November. The affected area included 3 out of 12 tálukás, 1 out of 2 towns, and 10 out of 1,629 villages. The population living on this area was 33,308, that of the Collectorate being 781,206. There were 142 attacks and 76 deaths, the percentage of deaths to attacks being 53·52; whilst of the population living on the affected area only 0·43 per cent. were attacked and 0·23 per cent. died.

Thána.

72. At the close of 1883, cholera was present in 3 tálukás of the Thána Collectorate but in January it ceased in the affected tálukas, and on the 28th it broke out at Datiwali, a small village of 371 inhabitants in the Kalyán Táluka. Five persons were attacked who died before the close of the month.

During the first week of February, the disease continued in the same village, causing 10 deaths out of 13 persons attacked. In March it left the affected locality but appeared in 6 villages of the Máhím, Bhiwndi, Murbád and Karjat tálukas. In April it was confined to a village in each of the Dáhánu and Bhiwndi tálukas, but in May it spread to 3 other villages in the Dáhánu, Máhím and Bhiwndi tálukas. In June it was present in somewhat severe type in 3 tálukas. In July it lingered in 3 villages of 3 tálukas. From August, the disease began to spread from village to village, and in September it was reported from 16 villages of 3 tálukas. In October it prevailed more or less in 5 tálukas. In November the type of the disease appeared to be somewhat mild, but in December it attained its maximum intensity and was present to a slight extent in the Murbád Táluka; it broke out very severely in the Karjat Táluka and town, and appeared afresh in the town of Kalyán itself. Cholera more frequently appears in the village of Karjat than in any other village in the Thána Collectorate. The persistence with which the disease clung to this village and to one of the neighbouring villages called Dahiwali in the Karjat Táluka was remarkable. Dr. Peacocke, the Acting Deputy Sanitary Commissioner, Western Registration District, was requested to proceed to Karjat as soon as the disease appeared to assume an epidemic form, and he submitted an able and interesting report on this outbreak, from which I take the following extract:—"The infected portion of Karjat rests in a valley running irregularly north and south for some 7 or 8 miles, and varying in breadth from 1 to 3. The lower ground is fertile and extensively sown with rice—a crop requiring much water for its cultivation. The atmosphere is depressingly warm, moist and still. Through the valley flows the Dhavali river, a clear bright stream, from which the villagers derive their chief water-supply. Numerous small villages are scattered up and down through the valley; many of them have suffered severely."

"*Dahivali.*—Dahivali, the largest village in the táluka with a population of 1,239, had between the 3rd October and 8th December 56 attacks and 37 deaths. Of the 37 deaths all but 2 occurred among the population inhabiting a low-lying row of huts on the western border of the village. The ground here is damp, whereas the eastern and central parts of the village are raised and consequently drier. This is a noteworthy fact, for the low-lying or affected part forms but a small portion of the village, probably not more than a fifth. The deaths were limited almost exclusively to the lower castes." As regards the out-break at Kalyán the Deputy Sanitary Commissioner says:—"The medical officers furnished me with a few particulars of the outbreak, but they disclose nothing which can be said to throw light on the direct cause. The disease is scattered through the town affecting all classes. The poor suffer most but none escape, save the Europeans. The water-supply of the town is bad and its sanitary condition unsatisfactory." The affected area included 9 out of 10 tálukas, 1 out of 2 towns, and 64 out of 1,880 villages. The population of this area was 78,339, that of the entire Collectorate being 807,367; so that 9·70 per cent. of the total population lived on the affected area. The attacks and deaths for the Collectorate were 870 and 558 respectively, and the percentage of deaths to attacks was 64·14; whilst of the population living on the affected area only 1·11 per cent. were attacked and 0·71 per cent. died.

City and Island of Bombay.

73. In the City and Island of Bombay cholera was present at the close of 1883 and continued during January 1884. It caused 99 deaths out of 124 persons attacked. This was the maximum for the year. In February the disease abated considerably but continued throughout the month and into March. In April only 7 deaths out of 10 attacks took place between the 15th and 16th. In May it re-appeared and increased in virulence, but from 1st June to 30th of July it decreased. In the report for the quarter ending 30th June the Health Officer remarks that "there was a remarkable connection observed between some groups of cases and well-water consumption following interruption of continuous Vehár and Tulsi Lake water-supply. In 3 of the well waters I found on examination organisms of a most suspicious type." In August, again, there was a sudden rise and the number of deaths rose from 8 to 73. In September no less than 92 deaths were returned, but in October and November the number fell to 46 and 49 respectively. In December 40 deaths were recorded. The attacks and deaths

for the city during the year were 727 and 568 respectively, the percentage of deaths to attacks being the very high one of 78·13. This high percentage attracted the attention of Government who called on the Surgeon General to explain it, who attributed it to defective statistics of attacks. In my opinion the long distances which the patients have to be carried to an hospital is one of the principal causes of the extreme fatality of cholera in Bombay. The subjoined table shows the cholera mortality by months from as far back as 1848, and the 36 years' mean is compared with that of the year under report:—

Table showing Cholera Mortality by Months for a Period of 36 years.

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.	Years.
1848 ..	..	11	7	17	10	9	6	2	2	..	5	..	69	1848.
1849 ..	..	..	1	4	1	..	..	121	690	869	250	632	2,128	1849.
1850 ..	141	53	260	607	296	259	324	348	143	51	53	453	2,997	1850.
1851 ..	1,873	905	1,018	661	373	339	73	37	25	19	20	207	5,485	1851.
1852 ..	408	91	160	271	149	151	165	56	19	10	6	24	1,520	1852.
1853 ..	23	8	8	6	16	9	6	6	6	250	571	240	1,148	1853.
1854 ..	214	299	372	724	530	950	317	68	14	11	9	9	3,507	1854.
1855 ..	60	22	22	302	585	273	167	52	75	46	21	20	1,645	1855.
1856 ..	164	256	241	358	280	197	89	22	19	38	40	142	1,846	1856.
1857 ..	459	165	306	363	249	302	157	86	32	31	18	13	2,181	1857.
1858 ..	19	9	8	15	11	9	5	8	11	6	7	7	116	1858.
1859 ..	9	10	9	7	69	843	320	170	41	85	131	282	1,985	1859.
1860 ..	289	332	396	321	163	107	89	128	61	47	29	9	1,961	1860.
1861 ..	15	18	5	4	12	18	13	10	11	34	35	466	641	1861.
1862 ..	625	240	339	266	367	218	117	93	161	272	201	269	3,170	1862.
1863 ..	89	50	89	161	153	161	412	240	173	181	176	319	2,209	1863.
1864 ..	622	401	302	680	837	395	371	351	232	88	137	431	4,847	1864.
1865 ..	363	549	522	356	624	206	116	62	31	32	22	13	2,837	1865.
1866 ..	13	15	12	16	21	15	27	43	63	49	31	27	332	1866.
1867 ..	11	21	12	28	5	9	5	5	7	6	4	..	111	1867.
1868 ..	1	..	..	3	3	2	4	6	1	43	63	101	227	1868.
1869 ..	157	93	97	91	32	41	54	47	60	26	3	3	754	1869.
1870 ..	6	3	5	3	7	12	4	73	76	41	64	92	386	1870.
1871 ..	68	41	37	24	15	10	3	11	13	29	8	4	263	1871.
1872 ..	7	2	4	7	6	7	46	54	32	11	3	11	190	1872.
1873 ..	22	13	17	12	8	7	3	1	2	3	2	2	92	1873.
1874 ..	1	..	2	2	7	..	2	1	2	2	..	..	19	1874.
1875 ..	1	1	..	31	67	132	279	168	43	53	38	21	834	1875.
1876 ..	1	..	2	4	5	9	119	141	64	23	6	..	374	1876.
1877 ..	1	61	111	185	337	704	495	337	162	42	21	54	2,510	1877.
1878 ..	35	109	224	128	137	99	156	116	43	53	40	25	1,165	1878.
1879 ..	27	10	13	4	29	14	33	74	64	41	10	4	323	1879.
1880 ..	8	6	3	2	2	2	1	1	1	2	1	1	30	1880.
1881 ..	..	..	2	9	68	85	111	73	48	33	9	91	529	1881.
1882 ..	89	52	17	5	1	..	12	12	8	2	..	1	190	1882.
1883 ..	2	1	1	15	84	34	231	429	152	24	4	37	1,014	1883.
Mean for 36 years.	161	107	129	156	155	156	121	96	72	57	57	113	1,380	Mean for 36 years.
1884 ..	99	32	33	7	70	19	8	73	92	46	49	40	568	1884.

Kolába.

74. At the close of 1883 cholera was present in two villages—Ashtami and Khamb—in the Roha Táluka of the Kolába Collectorate, and it continued in the same localities from 1st to 14th January 1884. It also appeared on the first of this month in a village of the Panvel Táluka and a week afterwards attacked another village in the Pen Táluka. The disease then visited some villages in the Mángaon and Alíbág tálukas. In February it declined rapidly but increased in March, as there were 28 deaths reported from 4 villages in the former and 129 deaths from 19 villages and one town in the latter. In April it ceased in 3 tálukas but was prevalent in two tálukas and one town. In May and June 1 and 4 deaths respectively were registered in Uran, a town in the Panvel Táluka. In July it continued in the affected tálukas and visited the town of Pen on the 19th. Soon after the disease became more widely spread, and 5 registration circles were affected in August and 4 in September, causing 130 and 91 deaths respectively. In October it lingered in 3 villages only of the Roha Táluka, but from 28th October to 18th December the disease was absent from the Collectorate; on the latter date it made its appearance in Taloje, a village in the Panvel Táluka, where the disease died out finally on the 23rd December. The affected area included 6 out of 7 tálukas, 2 out of 3 towns and 49 out of 1,191 villages. The population of this area was 75,223, that of the entire Collectorate being 482,830; so that 15·58 per cent. of the total population were living in the affected area. The attacks and deaths for the Collectorate during the year were 1,029 and 627 respectively, the percentage of the latter to the former being 60·93, whilst of the population living in the affected area 1·37 per cent. were attacked and 0·83 per cent. died.

Ahmednagar.

75. There was no cholera in the Ahmednagar Collectorate for the first 4 months of the year. On the 9th May an outbreak was reported to have occurred in Washe, a small village of 447 inhabitants in the Kopargaon Táluka. A week afterwards it spread

to another village in the same táluka and 4 other villages in the Ankola Táluka. In June the disease ceased in the Kopargaon Táluka but continued in one of the affected villages of the Ankola Táluka in which the last case occurred on the 28th of this month. The affected area included 2 out of 11 tálukas and 6 out of 1,331 villages. The population of this area was 3,556, that of the entire Zilla being 751,228; so that only 0·48 per cent. of the total population were living in the affected area. The attacks and deaths for the Collectorate were 55 and 24, and the percentage of the latter to the former was 43·64; whilst of the population living in the affected area 1·55 per cent. were attacked and 0·68 per cent. died.

Poona.

76. Poona Zilla was quite free from cholera for the first half of the year under report. On the 5th of July a death from cholera was reported in the City of Poona. There was no more cholera till the 11th October, but on this date it appeared in Kenjal, a village in the Purandhar Táluka, and 12 days afterwards it visited Mali, the civil lines in the Haveli Táluka. In November it died out in the Purandhar Táluka, prevailed in the affected locality of the Haveli Táluka, and a fatal case out of 4 persons attacked, took place in the Cantonment of Poona. On the 7th, a death occurred in the city of Poona in the person of a woman who had returned from Pandharpur fair. The disease ceased altogether on the 29th November. The affected area included 2 out of 8 tálukas, 1 out of 2 towns, 1 out of 2 Cantonments and 2 out of 1,181 villages. The population living on this area was 132,691, that for the Collectorate being 900,621; so that 14·73 per cent. of the total population lived on the affected area. The attacks and deaths for the Collectorate during the year were only 18 and 11 respectively, the percentage of deaths to attacks being 61·11.

Sholápur.

77. The entire Collectorate of Sholápur enjoyed perfect immunity from cholera for the first 3 quarters of the year. On the 23rd of October, however, an outbreak took place in 2 villages—at Gherdi in the Sángola Táluka, and at Asti in the Mádha Táluka. Next day it appeared in a village of the Sholápur Táluka, and on the 25th another village of the Sángola Táluka was affected. On the 26th it visited a village in the Pandharpur Táluka and on the 28th another village in the Sholápur Táluka was attacked. In November the disease was present in all the localities previously affected; a fatal case took place in the Málsiras Táluka, and 3 cases, of which 2 terminated fatally, occurred in the town of Pandharpur. In December the disease was confined to a village in the Pandharpur Táluka and the last case occurred on the 15th December in a village called Shevgaon Bhalwani. The affected area included 5 out of 7 tálukas, 1 out of 3 towns, and 13 out of the 709 villages. The population of this area was 31,915, and that of the whole Collectorate was 582,487; so that 5·48 per cent. of the total population lived on the affected area. There were 68 seizures and 31 deaths, the percentage of deaths to attacks being 45·59; whilst of the population living in the affected area 0·21 per cent. were attacked and 0·10 per cent. died.

Sátára.

78. Until 14th April there was no cholera in the Sátára Zilla, but on this date it was reported to have occurred in Shenwadi, a village in the Mán Táluka. On the 5th May it appeared in a village of the Wái Táluka. In the middle of May another village was affected, and 9 days afterwards it spread to a third village in the same táluka. After this an interval of more than two months elapsed without any fresh cases, but from 8th August it was reported to have broken out in 2 villages, one of which is situated in Tásgaon and the other in Válva Táluka. During the course of this month another village in the Válva Táluka was attacked. In September cholera re-appeared in 6 villages of the Wái Táluka and continued in two villages of the Válva Táluka. In October the disease though still present in the affected tálukas—Wái and Válva—began to abate gradually, as there were only 11 deaths reported in this month and 7 in November. The last case occurred on the 15th November in Máyani, a village in the Khatáv Táluka. The affected area included 6 out of 12 tálukas and 17 out of 1,340 villages, and the population of this area was 31,292, that of the entire Zilla being

1,062,350; so that 2·95 per cent. of the total population lived in the affected area. There were 245 attacks and 99 deaths, the percentage of the latter to the former being 40·40. Of the population living in the affected area 0·78 per cent. were attacked and 0·32 per cent. died.

Ratnágiri.

79. On the 8th January 1884 cholera broke out in Ghosale, a small village of 431 inhabitants in the Dápoli Táluka of the Ratnágiri Collectorate, where it lasted till the 25th, when it left this village but appeared in two other villages of the same táluka in February. One village of the Chiplún Táluka and 4 of the Sangmeshvar Táluka were also affected. In March and April it was prevalent in the Chiplún and Dápoli tálukás. On the last day of April it ceased in the Dápoli Táluka but continued in the Chiplún Táluka till the 31st May. In June there was no cholera in the Collectorate, but on the 1st July it appeared in the town of Vengurla. It re-appeared in the Chiplún and Dápoli tálukás. In August it prevailed in the affected localities and from September to November it was confined to the Dápoli Táluka. In December the disease left this locality and appeared for the first time in the Málvan Táluka on the 26th. The disease died out finally from the Collectorate on the 28th in Málvan Kasbe, a village in the Málvan Táluka. The affected area included 4 out of 8 tálukás, 1 out of 2 towns, and 21 out of 1,295 villages. The population living in this area was 51,609, that of the whole Zilla being 997,090; so that 5·17 of the total population lived in the affected area. There were 300 attacks and 144 deaths and the percentage of deaths to attacks was 48, whilst of the affected population 0·58 per cent. were attacked and 0·28 per cent. died.

Belgaum.

80. Cholera made its appearance on the 16th January in two villages simultaneously in the Belgaum Táluka. The disease lasted till the 26th, when it disappeared. From February to May an interval elapsed without any fresh cases, but on the 13th June it broke out in a village in the Chikodi Táluka. Next day it spread to another village and on the 27th to a third village in the same táluka, whilst a few cases were reported from the Parasgad Táluka on the 22nd June. From the beginning of July the disease assumed an epidemic form and spread rapidly from village to village, and by the end of the month it was reported from 40 villages of the 6 tálukás and from the town and Cantonment of Belgaum. A very careful and thorough inspection of the town of Belgaum was made by Dr. Channer, the Deputy Sanitary Commissioner, S. R. D., who made very useful suggestions to the Collector. In August the disease was present in 112 villages and in the towns of Belgaum and Gokák. The mortality (944) also reached its maximum during this month, but from September it began to decline gradually, as there were for the entire Collectorate 598 deaths in September, 319 in October, 169 in November and 157 in December. The disease continued to prevail in the Collectorate till the end of the month and it was present in 7 villages on the last day of the year. The affected area included 7 tálukás, 3 towns, 1 cantonment and 207 out of 1,073 villages—the population of the affected area was 371,905, that of the Collectorate being 864,014; so that 43·04 per cent. of the total population lived on the affected area. The attacks and deaths for the Collectorate were 5,399 and 2,701 respectively, the percentage of the latter to the former being 51·88; whilst of the affected population 1·45 per cent. were attacked and 0·73 per cent. died.

Dhárwár.

81. The Dhárwár Collectorate was free from cholera for the first two months of the year under review, but it broke out on the 19th March in Kasugal, a village in the Hubli Táluka. On the 23rd it appeared in a village of the Navalgund Táluka, but ceased on the same day and appeared in another village in the same táluka on the 1st April. By the 11th April the disease reached the town of Hubli. In May the disease was present in 12 villages of the 5 rural circles, and in two town circles—Gadag Bettigeri and Hubli. The incidence of the disease in Bettigeri was almost entirely confined to the low-caste people living in the poorer quarters of the town. The Dhedwáda, situated on the edge of the filthy "Landy" Nála, returned the most cases. A very thorough inspection was made of the towns of Gadag and Bettigeri by Dr. Channer, and such precautionary measures as

could be taken were suggested. By the end of May, the disease assumed an epidemic form in each táluka, and in June it was very widely spread as it was reported from 140 villages and from 4 principal registration towns. The percentage of mortality in the town of Hubli was very high amongst the low-caste Hindus but not a single Bráhmin living in this locality was attacked by cholera. In July the disease attained its greatest intensity as it invaded every táluka and town circle of the Collectorate, and during this month the maximum for the year was reached. The town of Hubli alone contributed no less than 280 deaths out of 1,733, which took place in the entire Collectorate during this month. The outbreak in so many localities simultaneously is most suggestive. The local conditions are thus described by the Collector: "There has been a remarkable absence of the heavy storms which generally occur in April and May. Drinking water is scarce and the heat is great. Mangoes are also plentiful and cheap, and it is probable that the epidemic had been partly caused by persons eating mangoes and melons in large quantities." The inhabitants of the town of Karajgi, the head-quarter of the táluka, suffered severely. Since the famine years no cholera had been known in this town, but on the 14th of June a severe outbreak commenced. The Deputy Sanitary Commissioner, S. R. D., was ordered to proceed to the affected localities forthwith, and he inspected several villages and towns and made valuable suggestions to the local authorities on sanitary matters. His reports show that until some definite action is taken regarding the sanitation of villages generally throughout the Presidency, no action on the part of the authorities can be more than palliative in reducing the ravages of cholera at the time of an outbreak. From August the disease began to decline rapidly and the number of deaths fell from 1,733 to 1,023 in August, to 443 in September, to 179 in October, and only to 52 in November. In December the disease lingered in the town of Dhárwár till the 22nd, on which date only one fatal case was recorded and with this death the disease died out finally in the Collectorate. The affected area included 14 tálukás, 4 towns and 424 out of 1,281 villages, and the population living on the affected area was 636,006, whilst that of the entire Collectorate was 882,907; so that 72·04 per cent. of the total population lived in the affected area. The attacks and deaths for the Collectorate during the year were 9,086 and 4,655 respectively, the percentage of the latter to the former being 51·23. Of the population living in the affected area 1·43 per cent. were attacked and 0·73 per cent. died.

Kaládgi.

82. Cholera was prevalent in the Kaládgi Collectorate at the close of 1883 and it continued in January. It was confined to one village in each of the Bijápur and Muddebihál tálukás. In February the disease died out in the Collectorate, as only one fatal case was reported from the town of Muddebihál on the 29th February. After this the Collectorate was free from cholera for the next 4 months. On the 28th June however, it broke out in a village of the Bádámi Táluka, and in July it spread so rapidly from village to village that by the end of the month 29 villages in 3 tálukás were invaded. In August it still continued to increase in the affected localities and appeared afresh in 3 other tálukás and in the town of Kaládgi. The mortality reached its maximum during this month, but from September, though it was present in all rural circles of the Collectorate, the disease began to abate and a progressive fall took place month by month, as there were 248 deaths in September, 195 in October, and 129 in November against 397 in August. In December the disease was present into 2 villages in the Bijápur Táluka and it died out finally on the 25th, when the last case took place in Sárvad, a village of this táluka. The affected area included 8 tálukás, one town, and 160 out of 1,140 villages, and the population of this area was 209,817, that of the whole Collectorate being 638,493: so that 32·86 per cent. of the total population lived in the area affected by cholera. There were, during the year, 2,317 seizures and 1,070 deaths, the percentage of the latter to the former being 46·18, whilst of the population living in the affected area 1.10 per cent. were attacked and 0·51 per cent. died.

Kánara.

83. Kánara Zilla was free from cholera for the first half of the year 1884. On the 19th of July however, it appeared in the small village of Margadi in the Mundgud Petha and by the end of the month it had spread to 3 other villages in the same circle. In August

it continued in two of the affected localities and on the 4th it attacked two fresh villages in the Sirsi Táluka. In September it abated in these two tálukás and at the close of the month the disease ceased. In October there was no cholera, but on the 23rd November a fatal case was returned from the Supa Petha. In December only one fatal case was reported from the Supa Petha, but the disease suddenly broke out in the two villages, namely Hanawad and Mangalwad of Haliyál Táluka. In the former there were 103 attacks and 73 deaths. At the end of the year there was no cholera in the Collectorate. The affected area included 4 out of 11 tálukás and 13 out of 1,107 villages, and the population living in this area was 6,620, that of the entire Zilla being 421,840; so that only 1·09 per cent. of the total population lived in the affected area. There were 142 attacks and 108 deaths, the percentage of deaths to attacks being 76·06, whilst of the population living in the affected area 2·14 per cent. were attacked and 1·63 per cent. died.

Surat.

84. On the 22nd March the first case of cholera occurred in a small village of Morthan in the Olpád Táluka of the Surat Collectorate. On the 27th of this month the disease appeared in the town of Surat. In April it ceased in the Olpád Táluka, but continued severely in the town of Surat where 89 deaths took place and appeared afresh in the Mándvi, Chorási, Bárdoli, Bulsár and Párdi tálukás, and in the town of Bulsár. In May it continued in the Chorási and Bulsár tálukás and was very prevalent in the town of Surat. Dr. Colah, the Deputy Sanitary Commissioner, Eastern Gujarát Registration District, observes "that no definite cause of the origin of the disease could be made out." The disease ceased entirely in the remaining circles but re-appeared in the Olpád Táluka and appeared for the first time in the Jalálpor Táluka. In June only a few cases were recorded in the Olpád and Chorási tálukás and the Collectorate was exempt for the next 3 months. On the 7th of October however the disease appeared again in a village of the Jalálpor Táluka where the last case was reported on the 13th of this month. The affected area included 7 out of 8 tálukas, 2 towns and 21 out of 780 villages; and the population of this area was 163,008, that of the entire Collectorate being 614,198; so that 26·54 per cent. of the total population lived in the affected area. The attacks and deaths for the Collectorate during the year were 439 and 255 respectively, the percentage of the latter to the former being 58·09; whilst of the population living in the affected area 0·27 per cent. were attacked and 0·16 per cent. died.

Broach.

85. On the 24th January the first cholera case was reported from the town of Ankleshvar which proved fatal on the 26th. Another case occurred on the 29th in the town of Broach itself, but it ended in recovery. In February the disease continued in the towns of Broach and Ankleshvar and appeared afresh in a village of the Broach Táluka. In March it prevailed in the circles previously affected and spread over the remaining circles of the Collectorate. The inhabitants of the City of Broach suffered very severely during this month as 77 deaths were reported. Dr. Colah, the Deputy Sanitary Commissioner, E. G. R. D., was ordered to proceed to Broach. He made a thorough inspection of the city, and pointed out that the present outbreak was a revitalization of the disease which was present in epidemic form in August 1883. He gives the following table:—

Divisions of the City.		No. of Houses.	Population by Census of 1881.	No. of Cases.	No. of Deaths.
Ward A.	1. Mojumpoa	1,453	10,928	7	3
	2. Dundia Bázár			15	8
Wards B. & C.	3. Hajikhán	3,363	11,951	16	9
	4. Joona			16	7
	5. Lál			42	28
Ward D.	6. Mota	4,155	14,549	61	23
	7. Vejulpura			87	33
	The whole city ...	8,971	37,428	244	111

and remarks "that in my inspection of the city, it struck me that the localities where the fewest cases occurred are situated on the east side of the city on an elevated and open position on the north bank of the Narbada, are freely open to the breeze and are not densely populated. On the other hand, the divisions where cholera has prevailed to a greater extent are those in which the population is densely packed. Some portions of Motabázár and Vejulpura are situated in low-lying tracts not admitting of a free circulation of the air." In fact it appears that the disease prevailed with the greatest severity in overcrowded localities not sufficiently ventilated. In classifying the deaths by caste he states that "among the Hindus the well-to-do classes (Bráhmins, Banias, Rajputs, &c.,) have suffered little and the poorer classes most." Dr. Colah could not trace the origin of the disease but notices that the persons attacked had never been out of Broach. It appears the outbreak was due to local insanitary conditions. In April the disease ceased in 2 circles, and abated considerably in the City of Broach and in 5 other circles. In May, however, the disease prevailed to a considerable extent and was present in 7 out of 8 registration circles. Dr. Colah also inspected several affected villages and brought to the notice of the authorities the insanitary conditions, which the inhabitants of these places were labouring under, and made several useful suggestions. In June cholera still prevailed in the same degree as in the preceding month, but in July it was present in only 3 circles. There was no cholera in August but a fatal case took place on the 5th September in the town of Ankleshvar which was the last for the Collectorate. The area affected included 6 tálukas, 2 towns and 78 out of 403 villages; and the population that lived in this area was 157,554, that of the whole Collectorate being 326,930; so that 48·19 per cent. of the total population lived in the affected area. There were during the year 1,206 seizures and 607 deaths, the percentage of the latter to the former being 50·33. Of the population living in the affected area 0·77 per cent. were attacked and 0·38 per cent. died.

Kaira.

86. Kaira Collectorate was exempt till the 11th May, but on this date cholera appeared at Kherda, a village in the A'nand Táluka. Two days afterwards it attacked another village in the same táluka and by the close of the month it spread to 17 other villages of 3 tálukas and 2 towns,—Borsad and Kapadvanj. In June the disease abated in the Kapadvanj Táluka and ceased in the Thásra Táluka but increased considerably in the Borsad and A'nand tálukás and appeared for the first time in the Nadiád Táluka. In July the maximum for the year was reached, as it was present in 6 tálukas and two towns causing 189 deaths out of 498 persons attacked. In August it began to decline rapidly and by the 21st of this month it disappeared. In September, October and November, the Collectorate was perfectly free from the disease, but on the 17th December a fatal case was reported from the town of Kaira. The affected area included 6 out of 7 tálukás, 3 out of 4 towns and 57 out of 577 villages; and the population of this area was 208,045, that of the entire Collectarate being 804,800; so that 25·84 per cent. of the total population lived in the affected area. The attacks and deaths were respectively 1,084 and 396 and the percentage of deaths to attacks was 36·53; whilst of the population living in the affected area 0·52 per cent. were attacked and 0·19 per cent. died.

Panch Maháls.

87. There was no cholera in the Panch Maháls Collectorate during the first quarter of the year, but on the 5th April two men and a woman were reported to have been attacked in the town of Dohad, one of whom died. In May the disease left this town but attacked another in the Kálol Táluka where there were 5 attacks and 3 deaths between the 26th and 28th. In June it continued in the town previously affected and attacked 6 other small villages in the same táluka. It also appeared in 7 small villages of 3 other tálukás in this month. In July all registration circles of the Collectorate were more or less affected and the number of deaths reached its maximum (370 attacks and 144 deaths). It abated in August and on the 2nd September the last case took place in the town of Kálol. The affected area included 5 tálukás, 2 towns, and 35 out of 673 villages, and the population living in this area was 68,634, that of the entire Zilla being 255,479; so that 26·87 per cent. of the total population lived in the affected area. There were 640 cases with 275 deaths and the percentage of the latter to the former

was 42·97; whilst of the population living in the affected area 0·90 per cent. were attacked and 0·40 per cent. died.

Ahmedabad.

88. Cholera did not appear in the Ahmedabad Zilla till the 16th May, but on this date it broke out in the town of Viramgám. On the 22nd it appeared in a village of the Paráutíj Táluka and nine days afterwards spread to 2 other villages in the same táluka. In June it ceased in the town of Viramgám but prevailed in the Paráutíj Táluka and appeared anew in the City of Ahmedabad on the 13th. In July it continued in the localities affected in the preceding month. In August the disease was also reported from these two tálukas, but on the 1st of this month it re-appeared in the City of Ahmedabad. In September the mortality rose from 27 in the previous month to 39, but by the end of this month it almost disappeared. On the 1st of October there was only one fatal case recorded in the town of Paráutíj, which was the last for the year in the Collectorate. The affected area included only 1 out of 7 tálukas, 2 out of 4 towns and 7 out of 857 villages; and the population living in this area was 158,097, that of the entire Collectorate being 856,324; so that 18·46 per cent. of the total population lived in the affected area. The attacks and deaths during the year were 223 and 116 respectively and the percentage was 52·02, whilst of the population that lived in the affected area 0·14 per cent. were attacked and 0·08 per cent. died.

Karáchi.

89. No cholera had been known in Sind since 1879 and this immunity was maintained until October 1884, on the 15th of which month the disease broke out in the village of Shah Hassan in the Sehwan Táluka of the Karáchi Collectorate. On the 16th it appeared in the Kotri Táluka, on the 27th in the Dádu Táluka, on the 29th in the Mirpur Batora Táluka, and on the 30th it reached the Sujáwal Táluka. On the same day, there were 2 cholera cases registered in the Jati Táluka and one in town of Karáchi. In November the disease ceased in the Sehwan Táluka but continued to prevail in the other affected tálukas, and spread rapidly to 6 fresh tálukas in the Collectorate. In the town of Karáchi a case which had been attacked in the previous month ended fatally. It is worthy of notice that although the death-rate in Karáchi Zilla was higher than any other District in Sind, the large and populous town of Karáchi escaped with but one death. This city has been lately provided with a good and abundant supply of water from a distant source. In December the disease increased somewhat in the Karáchi Táluka and re-appeared in the Sehwan Táluka, but abated considerably in 5 other tálukas and ceased entirely in 3 tálukas and in the town of Karáchi. The last case occurred on the 30th of December in the Jati Táluka. The affected area included 10 out of 13 tálukas, one town and 96 out of 722 villages, and the population of this area was 426,068, that of the District being 478,688; so that 80·89 per cent. of the total population lived in the affected area. There were 751 attacks and 517 deaths, and the percentage of deaths to attacks was 68·84; whilst of the population living in the affected area 0·18 per cent. were seized and 0·12 per cent. died.

Hyderabad.

90. Until the 19th of October there was no cholera in this Collectorate, but on this day it was reported to have broken out in the town of Hyderabad itself. Next day it appeared in the Moro Táluka and on the 22nd in the Tando Táluka. The disease spread from the affected localities to Dero Mohbat and Naushahro Tálukas on the 24th, to the Hyderabad Táluka on the 25th, and to the Badin Táluka on the 28th. On the 30th a person was attacked in the Tando Bágo Táluka but recovered. In November, the disease ceased in the Moro Táluka but continued in all the affected localities till the end of the month. The disease died out on the 1st December, and the last case was reported from the Tando or Guni Táluka. The affected area included 7 out of 13 tálukas, one town and 45 out of 1,104 villages, and the population living in this affected area was 438,366, that of the entire Collectorate being 754,624; so that 58·09 per cent. of the total population lived in the affected area. There were 242 attacks and 192 deaths, the percentage of deaths to attacks being 79·34; whilst of the population living in the affected area 0·06 per cent. were attacked and 0·04 per cent. died.

Thar and Párkar.

91. It is worthy of note that not a single case of cholera was reported from the Thar and Párkar District in Sind during the year.

Shikárpur.

92. Cholera made its first appearance in Nandero, a village in the Ratodero Táluka of the Shikárpur Collectorate, on the 2nd October. It prevailed in the towns of Sukkur and Rohri. As soon as intimation of this outbreak was received, Dr. Parker, the Deputy Sanitary Commissioner, Sind R.D., was requested by telegram to visit these towns. He impressed upon the local authorities the proper measures to be adopted to check the spread of the disease. According to his statement the disease first appeared in the person of a Musalman, employed as a coolie on board a barge, used to convey railway trucks across the Indus to and fro between Sukkur and Rohri. He was seized with cholera on the Sukkur side of the river and died. He is said to have suffered from fever for about a week before his death. The disease spread rapidly from place to place, and by the end of the month it was present in 9 registration circles. In November it ceased in one, continued in 8, and appeared afresh in 3 circles, but the type was much milder than in the preceding month, as the deaths amounted to 126 as compared with 529 in October. In December the disease was present in the Labdáriya Táluka only, in which the last case took place on the 14th. The affected area included 9 out of 15 tálukas, 2 out of 3 towns and 68 out of 1,370 villages. The population of this area was 481,787, that of the Collectorate being 852,986; so that 56·48 per cent. of the total population lived in the affected area. There were during the year 892 attacks, 659 of which terminated fatally, and the percentage of deaths to attacks was 73·88; whilst of the population living in the affected area 0·19 per cent. were seized and 0·14 per cent. died.

Upper Sind Frontier.

93. The first case of cholera was reported from Shahdádpur, a village in the táluka of the same name in the Upper Sind Frontier Collectorate on the 14th October. On the 21st it also appeared in the Kashmore Táluka. In November it was prevalent in the affected tálukas just named, and on the 12th it appeared anew in the Thul Registration Circle. The disease did not last long in this Collectorate, as the last case took place on the 24th November in the Shahdádpur Táluka. The area affected included 2 out of 3 tálukas and 23 out of 142 villages; and the population of this area was 86,857, that of the Collectorate being 124,181; so that 6·99 per cent. of the total population lived in the affected area. There were 186 cases of cholera, of which 107 or 57·53 per cent. were deaths. Of the population living in the affected area, 0·21 per cent. were attacks and 0·12 per cent. were deaths.

Attacks and deaths.

94. The table at page 65 shows the number of attacks and deaths, and the percentages of deaths to attacks in each Collectorate. The mean percentage of deaths to attacks throughout the Presidency was 52·93 against 47·76 in the preceding year. Very high percentages were noticed in the Hyderabad Collectorate, 79·34, and in the City of Bombay, 78·13. The next highest percentages were 76·06 in the Kánara Collectorate and 73·88 in the Shikárpur Collectorate. In the Násik, Thána, Kolába, Poona, Surat, Karáchi and Jacobabad Collectorate, the percentages were above the mean; but in the remaining Collectorates they were below.

Statement appended to to Cholera Map.

95. The following table is a statement appended to the cholera map, which shows each Collectorate affected by cholera, the name and number of each circle, its population, the dates of first and last cases, the total cholera deaths, their ratios per 10,000 of population, the period of maximum intensity, the number of villages in each rural circle, and the number of those affected and not affected by the disease:—

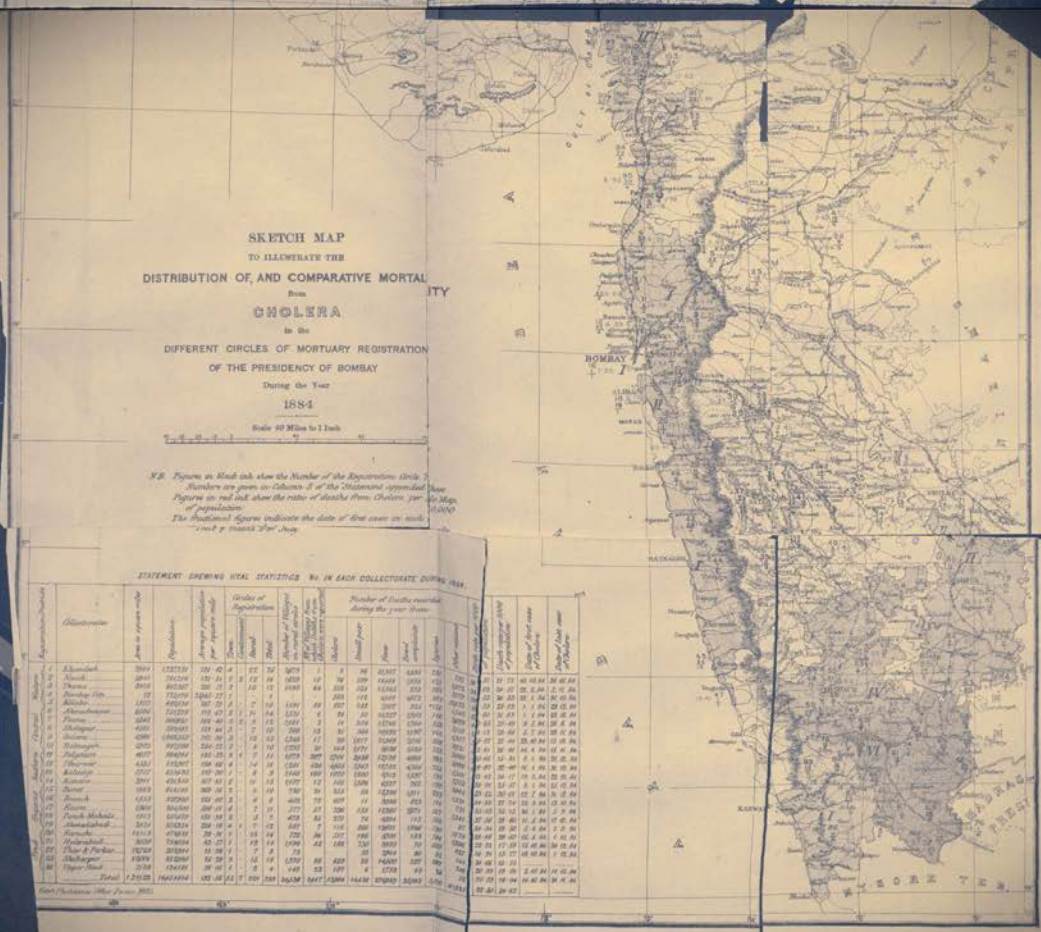
Statement appended to Cholera Map illustrating the Distribution, &c., of Cholera in the Bombay Presidency during the year 1884.

1	2	3	4	5	6	7	8	9		10	11	
								Period of maximum intensity of the Disease.			Number of those	
Collectorates.	Number of Circles as shown in the Map.	Name of Circle.	Population.	Date of first Case of Cholera in the Circle during the year.	Date of last Case of Cholera in the Circle during the year.	Total Deaths from Cholera in the Circle during the year.	Ratio per 10,000.	From	To	Number of Villages in each of the Rural Circle.	Affected by Cholera.	Not affected by Cholera.
Khándesh ..	1	Bhusával .. R. C.	96,160	10th October 1884.	26th October 1884.	8	0·83	October 1884.	October 1884.	168	1	167
Násik ..	2	Násik .. R. C.	67,910	5th April "	17th September "	6	0·88	April "	April "	135	4	131
	3	Igatpuri .. "	68,749	3rd " "	31st May "	30	4·36	" "	" "	128	5	123
	4	Nándgaon .. "	30,399	19th " "	2nd " "	8	2·63	" "	" "	88	1	87
	5	Násik .. T. C.	24,101	22nd February "	2nd November "	32	13·28	" "	" "	..	..	..
Thána ..	6	Dáhánu .. R. C.	109,322	30th April "	4th July "	45	4·21	June "	June "	289	4	285
	7	Máhim .. "	77,360	23rd March "	16th " "	48	6·20	" "	" "	186	4	182
	8	Sháhápur .. "	107,729	2nd November "	6th November "	2	0·19	November "	November "	273	1	272
	9	Murbád .. "	63,634	3rd March "	31st December "	25	3·91	October "	" "	171	5	166
	10	Kalyán .. "	65,078	28th January "	29th " "	36	5·53	December "	December "	222	6	216
	11	Bhiwandi .. "	75,363	11th March "	29th October "	111	14·73	March " / September "	March " / September "	194	11	183
	12	Bassein .. "	68,967	25th June "	31st " "	44	6·39	October "	October "	92	4	88
	13	Sálsette .. "	93,683	13th September "	24nd " "	19	2·03	September "	September "	112	8	199
	14	Karjat .. "	82,062	12th March "	31st December "	191	23·27	October "	December "	268	26	242
	15	Kalyán .. T. C.	12,910	20th December "	31st " "	36	27·90	December "	" "	..	..	..
Bombay City ..	16	Bombay (City) .. T. C.	773,196	1st January "	29th " "	568	7·35	January " / May " / August "	January " / May " / September "	..	..	..
Kolába ..	17	Panvel .. R. C.	90,830	1st " "	23rd December "	116	12·77	July "	August "	218	9	209
	18	Alibág .. "	60,762	19th " "	18th September "	68	9·75	August "	" "	171	3	168
	19	Pen .. "	70,200	8th " "	7th August "	85	12·18	January "	March "	199	4	195
	20	Roha .. "	44,835	1st " "	28th October "	68	15·17	September "	September "	133	9	124
	21	Mángaon .. "	81,065	9th " "	30th September "	206	25·41	April " / August "	April " / September "	225	11	214
	22	Mahád .. "	102,587	11th March "	23rd April "	53	5·17	March "	March "	245	13	232
	23	Panvel .. T. C.	10,351	6th August "	15th August "	2	1·93	August "	August "	..	..	..
	24	Mahád .. "	6,804	7th March "	2th April "	29	42·62	April "	April "	..	..	..
Ahmednagar ..	25	Ankola .. R. C.	60,800	15th May "	28th June "	18	2·96	May "	May "	156	4	152
	26	Kopargaon .. "	63,789	9th " "	22nd May "	6	0·94	" "	" "	121	2	119
Poona ..	27	Purandhar .. R. C.	75,678	11th October "	13th October "	3	0·40	October "	October "	92	1	91
	28	Haveli .. "	150,059	23rd " "	28th November "	3	0·20	" "	" "	237	1	236
	29	Poona .. T. C.	99,622	5th July "	29th " "	4	0·40	November "	November "	..	..	..
	30	Poona .. Ct.	30,129	15th November "	18th " "	1	0·33	" "	" "	..	..	..
Sholápur ..	31	Sholápur .. R. C.	89,649	24th October "	3rd November "	7	0·78	October "	October "	146	2	144
	32	Mádha .. "	67,961	23rd " "	8th " "	2	0·29	" "	November "	89	2	87
	33	Pandharpur .. "	55,302	26th " "	15th December "	7	1·27	November "	December "	84	3	81
	34	Sángola .. "	62,849	23rd " "	15th November "	12	1·99	October "	October "	76	5	71
	35	Málsiras .. "	58,322	1st November "	1st " "	1	0·17	November "	November "	69	1	68
	36	Pandharpur .. T. C.	26,910	6th " "	21st " "	2	1·18	" "	" "	..	..	..
Sátára ..	37	Sátára .. R. C.	90,885	9th November "	17th November "	3	0·33	November "	November "	147	2	145
	38	Wái .. "	76,034	5th May "	2nd " "	60	7·80	September "	September "	124	8	116
	39	Válva .. "	109,408	8th August "	4th October "	23	1·86	August "	August "	136	4	132
	40	Tásgaon .. "	79,704	8th " "	23rd August "	8	1·00	" "	" "	49	1	48
	41	Khatáv .. "	74,027	15th November "	18th November "	3	0·41	November "	November "	84	1	83
	42	Mán .. "	52,111	14th April "	14th April "	2	0·38	April "	April "	78	1	77
Ratnágiri ..	43	Málvan .. R. C.	109,953	26th December "	28th December "	2	0·19	December "	December "	67	1	66
	44	Sangameshvar .. "	104,640	7th February "	29th February "	20	1·91	February "	February "	179	4	175
	45	Chiplún .. "	168,921	28th " "	18th August "	26	1·54	March " / July "	March " / August "	212	4	208
	46	Dápoli .. "	141,012	8th January "	30th November "	84	5·96	" "	July "	247	12	235
	47	Vengurla .. T. C.	8,947	1st July "	26th August "	12	13·41	" "	" "	..	..	..
Belgaum ..	48	Belgaum .. R. C.	95,780	16th January "	31st December "	100	10·44	September " / December "	September " / December "	199	14	185
	49	Sampgaon .. "	119,843	19th July "	31st " "	521	43·47	August "	October "	123	40	83
	50	Bidi or Khánápur .. "	79,264	28th " "	...	176	22·20	"	August " / November "	219	10	209
	51	Chikodi .. "	245,614	13th June "	28th October "	1,047	42·63	July "	December "	213	66	147
	52	Parasgad .. "	91,824	22nd " "	24th November "	235	25·59	August "	August "	127	27	100
	53	Gokák .. "	82,722	2nd July "	13th " "	299	36·15	" "	" "	113	36	77
	54	Athni .. "	94,775	9th August "	17th " "	242	25·53	September "	September "	80	14	66
	55	Belgaum .. T. C.	23,115	21st July "	30th December "	22	9·52	July "	July "	..	..	..
	56	Gokák .. "	10,307	19th August "	30th " "	44	42·69	October "	November "	..	..	..
	57	Athni .. "	11,166	5th September "	10th October "	5	4·47	September "	September "	..	..	..
	58	Belgaum .. Ct.	9,582	6th July "	29th December "	10	10·44	July "	July "	..	..	..
Dhárwár ..	59	Dhárwár .. R. C.	83,946	25th June " / 5th July "	9th November " / 17th " "	343 / 55	41·41	July " / October "	July " / November "	127	47	80
	60	Mugód Petha .. "										
	61	Hubli .. "	55,320	19th March "	25th October "	532	96·17	June "	July "	70	47	23
	62	Navalgund .. "	87,832	23rd " " / 17th June "	1st November " / 17th " "	691 / 90	66·15	July " / June "	September " / July "	89	66	23
	63	Nargund .. "										
	64	Gadag .. "	83,332	20th May " / 22nd " "	16th " " / 7th September "	403 / 168	69·12	" " / " "	" " / June "	99	56	43
	65	Mundargi Petha .. "										
	66	Kalghatgi .. "	50,769	24th June "	20th November "	136	26·80	July "	August "	105	15	90
	67	Bankápur .. "	76,654	1st June "	6th October "	315	41·15	June "	" "	142	44	98
	68	Ron .. "	60,724	31st May "	20th November "	259	42·65	July "	" "	59	35	24
	69	Karajgi .. "	83,216	26th " "	1st October "	627	75·35	June "	June "	130	61	69
	70	Hángal .. "	65,787	9th June "	15th November "	255	38·76	" "	August "	162	25	137
	71	Ránebennur .. "	64,011	28th May "	23rd August "	158	24·68	July "	July "	121	20	101
	72	Cod .. "	80,245	26th June "	31st " "	71	8·84	" "	" "	177	8	169
	73	Dhárwár .. T. C.	27,191	10th " "	22nd December "	142	52·22	" "	August "	..	...	..
	74	Hubli .. "	36,677	11th April "	14th October "	466	127·06	" "	July "	..	..	..
	75	Gadag Bettigeri .. "	17,001	28th May "	8th September "	133	78·23	June "	June "	..	..	..
	76	Ránebennur .. "	10,202	1st June "	31st July "	6	5·88	July "	July "	..	..	..
Kaládg ..	77	Indi .. R. C.	71,910	13th October "	24th November "	44	6·12	October "	October "	121	7	114
	78	Muddebihál .. "	65,024	11th January "	16th " "	50	7·69	August "	August "	149	12	137
	79	Sindgi .. "	72,650	18th October "	24th " "	15	2·07	October "	November "	141	5	136
	80	Bágevádi .. "	86,743	12th August "	30th " "	225	30·24	September "	October "	120	28	92
	81	Bijápur .. "	76,896	8th January "	25th December "	97	12·61	October "	November "	92	14	78
	82	Bágalkot .. "	89,132	4th July "	19th November "	279	31·30	August "	August "	162	42	20
	83	Bádámi .. "	89,047	28th June "	15th " "	255	28·64	" "	" "	196	85	160
	84	Hungund .. "	80,037	3rd July "	15th " "	63	7·87	July "	" "	160	17	143
	85	Kaládgi .. T. C.	7,024	14th August "	31st August "	5	7·12	August "	" "	..	..	..

1	2	3	4	5	6	7	8	9		10	11	
Collectorates.	Number of Circles as shown in the Map.	Name of Circle.	Population.	Date of first Case of Cholera in the Circle during the year.	Date of last Case of Cholera in the Circle during the year.	Total Deaths from Cholera in the Circle during the year.	Ratio per 10,000.	Period of Maximum intensity of the Disease. From	To	Number of Villages in each of the Rural Circle.	Number of those Affected by Cholera.	Number of those Not affected by Cholera.
Kánara	86	Sirsi .. .. R. C.	62,400	4th August 1884.	18th Sept. 1884.	7	1·12	August 1884.	September 1884.	258	3	255
	87	Mundgod Petha	17,685	10th July ..	30th	23	13·01	.. ..	August ..	75	6	69
	88	Haliyál	61,154	12th December ..	31st December ..	76	12·73	December ..	December ..	216	4	212
	89	Supa Petha		23rd November ..	16th	2		November ..	.. ..			
Surat	90	Olpád .. .. R. C.	62,049	22nd March ..	21st June ..	45	7·25	May ..	May ..	120	8	112
	91	Mándvi	50,810	22nd April ..	20th April ..	10	1·96	April ..	April ..	141	1	140
	92	Chorásí	44,764	12th	4th June ..	30	6·70	.. ..	May ..	66	4	62
	93	Bárdoli	76,109	18th	29th April ..	13	1·71	.. ..	April ..	124	1	123
	94	Jalálpor	74,016	22nd May ..	13th October ..	8	1·08	May ..	May ..	91	3	88
	95	Bulsár	67,478	28th April ..	27th May ..	40	5·93	.. ..	.. ..	94	3	91
	96	Párdi	55,761	5th	5th April ..	1	0·18	April ..	April ..	82	1	81
	97	Surat .. .. T.C.	109,844	27th March ..	17th May ..	107	9·74	.. ..	.. ..	..	..	..
	98	Bulsár	13,229	28th April ..	28th April ..	1	0·76	.. ..	.. ..	..	..	..
Broach	99	Broach .. .. R. C.	73,220	20th February ..	25th June ..	136	18·56	May ..	May ..	104	26	78
	100	Vágra	33,902	20th March ..	28th July ..	50	14·75	.. ..	July ..	69	10	59
	101	A'mod	39,641	16th	19th	27	4·29	March ..	March ..	48	12	36
								May ..	May ..			
	102	Jambusar..	68,222	31st March ..	20th	158	23·63	June ..	June ..	82	13	69
	103	Ankleshvar	65,034	24th January ..	5th September ..	74	17·82	May ..	.. ..	100	17	83
	104	Hánsot Petha		13th March ..	6th May ..	42		March ..	March ..			
	105	Broach .. .. T.C.	37,231	21st February ..	4th June ..	126	33·80	.. ..	.. ..	..	..	..
	106	Jambusar..	11,479	21st March ..	22nd	4	3·47	June ..	June ..	..	..	..
Kaira	107	Mehmadabad .. R. C.	76,226	4th July ..	8th July ..	3	0·39	July ..	July ..	59	2	57
	108	Nadiád	133,002	7th June ..	18th August ..	39	2·91	.. ..	.. ..	92	11	81
	109	Borsad	131,093	26th May ..	26th July ..	47	3·59	.. ..	.. ..	80	13	76
	110	A'nand	154,118	11th	11th August ..	219	14·21	June ..	.. ..	74	24	50
	111	Thásra	84,866	16th	25th July ..	7	0·82	July ..	.. ..	97	2	95
	112	Kapadvanj	78,882	17th	1st	21	2·67	May ..	May ..	85	5	80
	113	Kaira .. .. T. C.	12,640	17th December ..	17th December ..	1	0·79	December ..	December ..	..	..	..
	114	Borsad	12,228	27th May ..	8th August ..	37	30·26	July ..	July ..	..	..	..
	115	Kapadvanj	14,442	21st	21st	22	15·24	.. ..	.. ..	..	..	..
Panch Mahále	116	Godhra .. .. R. C.	64,976	2nd June ..	10th	9	1·39	June ..	July ..	232	3	229
	117	Dohad	47,219	2nd	6th	19	4·03	.. ..	June ..	120	7	113
	118	Kálol	43,269	26th May ..	2nd September ..	135	31·21	July ..	July ..	66	13	53
	119	Jhálod	41,926	17th July ..	22nd July ..	3	0·72	.. ..	.. ..	99	2	97
	120	Háloi	32,253	14th June ..	31st August ..	59	17·14	August ..	August ..	166	10	156
	121	Godhra .. .. T. C.	13,342	28th July ..	27th	24	18·00	.. ..	.. ..	..	..	..
	122	Dohad	12,394	5th April ..	23rd July ..	26	20·97	July ..	July ..	..	..	..
Ahmedabad	123	Parántij .. .. R. C.	107,554	22nd May ..	1st October ..	30	2·79	June ..	June ..	181	7	154
	124	Ahmedabad .. T. C.	124,767	13th June ..	28th September ..	59	4·73	July ..	July ..	..	..	..
	125	Viramgám	18,090	16th May ..	29th	27	14·22	Setember ..	September ..	..	..	..
Karáchi	126	Karáchi .. .. R.C.	20,236	16th November ..	13th December ..	19	9·38	December ..	December ..	Information not available in the Census Report.	1	Vide remark in Column 10.
	127	Dádu	66,811	21st	.. .. ..	9	1·35	November ..	November ..		3	
	128	Sehwan	64,827	14th October ..	25th	50	9·20	October ..	October ..		6	
	129	Kotri	24,870	16th	4th November ..	54	21·71	.. ..	.. ..		2	
	130	Tatta	39,750	27th November ..	27th	1	0·25	November ..	November ..		1	
	131	Ghorábári	34,360	23rd	11th December ..	17	4·94	.. ..	December ..		3	
	132	Mirpur Batoro	32,179	29th October ..	26th	59	18·34	.. ..	November ..		15	
	133	Belo or Suj'wal.. ..	20,314	30th	14th November ..	51	16·82	.. ..	.. ..		16	
	134	Jati	27,655	14th November ..	30th December ..	117	43·25	November ..	.. ..		18	
	135	Shahbandar	27,814	1st	19th	139	49·97	.. ..	.. ..		31	
	136	Karáchi .. .. T. C.	68,332	28rd	23rd November ..	1	0·14	.. ..	.. ..		..	
Hyderabad	137	Hyderabad .. R. C.	67,630	26th October ..	9th November ..	22	3·34	November ..	November ..		13	
	138	Gunj or Tánda	71,162	22nd	1st December ..	37	5·20	October ..	.. ..		6	
	139	Badin	68,768	28th	9th November ..	33	5·02	November ..	.. ..		12	
	140	Tándo Ágo	58,473	3rd November ..	8th	15	2·70	.. ..	.. ..		6	
	141	Dero Mohbat	37,260	24th October ..	3rd	12	3·22	October ..	October ..		3	
	142	Naushahro	61,235	.. ..	.. .. ..	5	0·81	.. ..	.. ..		2	
	143	Moro	44,443	20th	27th October ..	5	1·13	.. ..	.. ..		3	
	144	Hyderabad .. T. C.	45,195	19th	10th November ..	63	13·94	.. ..	.. ..		..	
Shikárpur	145	Shikárpur .. R. C.	32,616	25th October ..	13th	39	11·96	October ..	October ..		11	
	146	Sukkur	61,238	17th	.. .. ..	50	9·76	.. ..	.. ..		9	
	147	Naushahro	55,728	7th November ..	24th	42	7·54	November ..	November ..		8	
	148	Kobri	68,582	16th October ..	14th	139	26·14	October ..	October ..		4	
	149	Ghotki	61,502	30th	12th	4	0·65	November ..	November ..		2	
	150	Lárkhána	83,952	22nd	11th	171	20·37	October ..	October ..		12	
	151	Rato-dero	59,950	2nd	1st	34	5·67	.. ..	.. ..		4	
	152	Labdárya	33,088	9th	14th December ..	56	16·58	.. ..	.. ..		21	
	153	Tigar	31,965	2nd November ..	3rd November ..	1	0·31	November ..	November ..		1	
	154	Sukkur .. .. T. C.	27,339	4th October ..	15th	102	37·24	October ..	October ..		..	
	155	Lárkhána	13,188	28th	28th October ..	1	0·76	.. ..	.. ..		..	
Upper Sind Frontier.	156	Thul .. .. R. C.	43,025	12th November ..	19th November ..	22	5·11	November ..	November ..		3	
	157	Kashmor	43,832	14th October ..	24th	85	19·39	October ..	.. ..		20	

Cholera Map.

96. The map illustrates the distribution of, and mortality from, cholera in the different registration circles in which the disease prevailed. As in the previous year a statement is embodied for easy reference, showing in each district the area, population, density per square mile, number of registration circles and villages, deaths from different causes, birth and death ratios, and dates of the first and last cases of cholera. The map has also been coloured in different shades of green according as a high or low death-rate obtained in the affected districts.



SKETCH MAP

TO ILLUSTRATE THE

DISTRIBUTION OF, AND COMPARATIVE MORTALITY

from

CHOLERA

in the

DIFFERENT CIRCLES OF MORTUARY REGISTRATION

OF THE PRESIDENCY OF BOMBAY

During the Year

1884

Scale 80 Miles to 1 Inch

N.B. Figures in black ink show the Number of the Registration Circle to which those Numbers are given in Column 5 of the Statement appended to this Map.
Figures in red ink show the ratio of deaths from Cholera per 10,000 of population.
The Traditional figures indicate the date of first cases in each Circle.
See Chart & Sketch 'For' Map.

STATEMENT SHEWING VITAL STATISTICS &c. IN EACH COLLECTORATE DURING 1884.

Registration Districts		Collectorates	Area in square miles	Population	Average population per square mile	Circles of Registration: Total	Circles of Registration: Cholera	Circles of Registration: Fever	Circles of Registration: Bowel	Number of Villages in which deaths from Cholera were recorded	Number of Deaths recorded during the year from: Cholera	Cholera: Death rate per 1000	Fever	Fever: Death rate per 1000	Bowel complaints	Bowel complaints: Death rate per 1000	Other causes	Total deaths from all causes	Death rate per 1000 of population	Date of first case of Cholera	Date of last case of Cholera
Central	1	Khandesh	7004	1,737,139	248	10	4	22	34	1070	3	2	16	12,917	4,334	1,351	18,270	10.51	21 Ja	30 Ja
	2	Nasik	4840	761,104	157	11	2	12	14	1033	17	22	139	19,619	1,939	1,751	21,446	28.18	24 Ja	30 Ja
	3	Poona	6004	867,567	144	13	1	10	12	1080	44	51	323	13,962	572	365	14,902	17.18	30 Ja	30 Ja
	4	Bombay City	22	773,196	35,145	171	1						1,885	2,442	4,072	4,072	10,399	13.45	30 Ja	30 Ja
	5	Kolaba	1,707	449,004	263	23	3	7	10	1,191	19	42	1,43	2,907	324	1,134	4,365	9.72	23 Ja	1 Fe
	6	Ahmednagar	6,694	721,212	108	16	3	14	14	1,332	4	6	14	14,327	1,900	1,1	16,242	22.52	30 Ja	30 Ja
	7	Poona	5,840	968,921	165	41	3	3	15	1,641	3	3	3,14	13,746	1,700	1,1	16,449	16.98	25 Ja	30 Ja
	8	Satara	4,951	1,010,971	204	40	3	10	10	788	13	13	364	10,992	1,197	1,1	12,553	12.42	30 Ja	30 Ja
	9	Sholapur	4,986	1,066,352	214	30	3	12	13	1,205	13	30	1,017	11,408	2,301	1,1	14,757	13.84	25 Ja	30 Ja
	10	Belgaum	4,763	1,012,108	214	32	3	10	12	1,703	37	34,4	1,171	10,38	2,151	1,1	13,571	13.41	30 Ja	30 Ja
	11	Dharwar	4,017	1,040,914	261	35	4	7	11	1,078	207	199	2,848	12,218	4,000	1,1	19,066	18.32	30 Ja	30 Ja
	12	Kanara	4,331	1,121,917	259	42	4	14	14	1,561	184	164,1	1,543	10,121	4,000	1,1	15,664	13.96	30 Ja	30 Ja
	13	Kolaba	2,717	1,114,103	410	30	4	8	8	1,146	180	161,0	1,180	4,913	1,207	1,1	7,300	6.55	30 Ja	30 Ja
	14	Ratnagiri	2,011	1,016,110	505	42	4	13	13	1,077	12	11,9	1,208	6,207	702	1,1	8,119	7.99	30 Ja	30 Ja
	15	Surat	1,963	1,141,105	581	38	5	14	19	1,180	34	32,1	33	12,198	1,911	1,1	14,143	12.39	25 Ja	30 Ja
	16	Broach	1,512	1,012,105	669	40	5	8	8	1,015	78	107	11	8,986	1,215	1,1	10,212	10.09	30 Ja	30 Ja
	17	Kaira	1,866	1,140,101	611	37	5	7	7	1,177	27	23,1	1,133	11,180	1,271	1,1	13,584	11.91	30 Ja	30 Ja
	18	Panch Mahals	1,613	1,014,159	628	38	5	5	7	1,473	81	80,0	74	4,394	1,112	1,1	5,581	5.50	27 Ja	30 Ja
	19	Ahmedabad	3,131	1,153,134	368	46	6	7	12	1,147	7	6,1	1,1	8,811	1,700	1,1	11,512	9.98	30 Ja	30 Ja
	20	Kaira	1,615.5	1,148,131	711	38	7	15	14	1,172	36	31,1	1,181	6,741	1,1	1,1	8,922	7.77	30 Ja	30 Ja
	21	Hyderabad	3,030	1,140,104	376	37	7	13	14	1,198	42	148	1,351	10,913	1,1	1,1	12,412	10.88	30 Ja	30 Ja
	22	Thar & Parkar	10,740	1,121,104	104	36	7	7	8	1,1			15	2,844	1,1	1,1	2,859	2.55	30 Ja	30 Ja
	23	Shikarpur	1,919	1,121,104	584	38	7	14	14	1,172	88	149,0	33	14,620	1,127	1,1	15,747	13.98	30 Ja	30 Ja
	24	Upper Sind	2,738	1,141,101	417	41	7	8	8	1,141	13	11,1	1	1,733	1,1	1,1	1,734	1.52	30 Ja	30 Ja
		Total	1,720,121	14,424,414	181	41	111	7	229	238	24,134	14.07	13,894	14,138	179,923	24,340	1,1	219,403	15.21	21 Ja	30 Ja

Govt. Photozincotype Office, Poona, 1885.

SMALL-POX.

Small-pox mortality by sexes.

97. During 1884 the deaths from small-pox of 7,327 males and 7,111 females, or a total of 14,438 persons, were recorded against 13,404 in 1883, and a decennial mean of 6,869.

Small-pox deaths since 1873.

98. The number of deaths registered from this disease in each year since 1873 is as follows :—

Years.	Number of Deaths.	Years.	Number of Deaths.
1873	9,935	1879	1,156
1874	3,903	1880	940
1875	3,461	1881	539
1876	11,817	1882	1,630
1877	27,369	1883	13,404
1878	4,475	1884	14,438
Total for 6 years ...	60,960	Total for 6 years ...	32,107

Though the decrease in the second period of six years ending 1884 is very marked, the number of deaths in (1884) is the second highest of the series and was only exceeded in 1877 when 27,367 deaths were recorded.

Deaths by Districts and Collectorates.

99. The following table shows the deaths during 1884 arranged according to Registration Districts and Collectorates :—

Districts.	Number.	Collectorates.	Population according to Census of 1881.	Deaths from Small-pox in: Mean for 10 years from 1874 to 1883.	Ratio per 1,000 of Population.	1883.	Ratio per 1,000 of Population on Census of 1881.	1884.	Ratio per 1,000 of Population on Census of 1881.
Western Registration District.	1	Khándesh	1,237,231	1,021	0·94	2,345	1·90	96	0·08
	2	Násik	751,296	502	0·67	525	0·67	569	0·77
	3	Thána	897,267	421	0·54	1,568	1·87	529	0·65
	4	Bombay	773,196	720	1·05	1,431	1·85	112	0·14
	5	Kolába	462,830	205	0·45	431	1·09	283	0·59
Central Registration District.	6	Ahmednagar	751,228	277	0·36	352	0·47	50	0·07
	7	Poona	900,621	431	0·48	1,225	1·36	308	0·34
	8	Sholápur	582,487	134	0·20	55	0·09	364	0·62
	9	Sátára	1,062,350	169	0·16	385	0·36	1,217	1·15
	10	Ratnágiri	997,090	404	0·40	991	0·99	1,171	1·17
Southern Registration District.	11	Belgaum	864,014	374	0·41	440	0·52	2,486	2·87
	12	Dhárwár	882,907	439	0·46	493	0·56	2,543	2·88
	13	Kaládgi	678,498	210	0·28	645	1·02	1,800	2·82
	14	Kánara	421,840	120	0·30	147	0·35	1,306	3·10
Eastern Gujarát Registration District.	15	Surat	614,198	472	0·77	1,342	2·18	63	0·10
	16	Broach	326,930	144	0·42	140	0·43	11	0·03
	17	Kaira	893,800	200	0·25	13	0·02	138	0·17
	18	Panch Mahále	255,479	37	0·15	31	0·12	74	0·29
	19	Ahmedabad	856,224	219	0·26	68	0·08	260	0·30
Sind Registration District.	20	Karáchi	473,688	78	0·18	270	0·56	750	0·41
	21	Hyderabad	754,624	136	0·19	500	0·66	196	0·99
	22	Thar and Párkar	293,344	10	0·05	13	0·06	53	0·26
	23	Shikárpur	852,986	129	0·16	4	0·00	28	0·03
	24	Upper Sind Frontier	124,181	17	0·17	..	..	6	0·05

ABSTRACT.

Western Registration District	4,081,830	2,869	0·77	6,290	1·54	1,614	0·39
Central " "	4,293,776	1,415	0·32	3,008	0·70	3,110	0·72
Southern " "	2,807,254	1,143	0·38	1,725	0·61	8,135	2·90
Eastern Gujarát " "	2,857,731	1,072	0·38	1,894	0·66	546	0·19
Sind " "	2,413,823	370	0·15	787	0·33	1,033	0·43
Presidency ..	16,454,414	6,869	0·42	13,404	0·81	14,438	0·88

From the above table it will be noticed that small-pox prevailed in an epidemic form in three districts. It was most severe in the Southern Registration District where the ratio per 1,000 of population was the very high one, 2·90 against 0·61 in 1883, and a decennial mean of 0·38. In the Central Registration District there was a ratio of 0·72 against 0·70 in the previous year and 0·32 the decennial mean, and in the Sind Registration District the ratio was 0·43 per 1,000 of population against 0·33 in 1883 and 0·15 the mean of the previous ten years. In the Western Registration District and in the Eastern Gujarát Registration District there was a decrease during the year, their respective ratios being 0·39 against 1·54 and 0·77 in the former, and 0·19 against 0·56 and 0·38 in the latter. According to Collectorates the highest ratio per 1,000 of population, 3·10, took place in Kánara against 0·35 in the previous year and a decennial mean of 0·30. The next highest ratios occurred in Dhárwár 2·88, Belgaum 2·87, Kaládgi 2·82, Ratnágiri 1·17, and Sátára 1·15. The lowest ratio, 0·03, was observed in the two Collectorates of Broach and Shikárpur, and the fewest number of deaths, 6, were reported from the Upper Sind Frontier. The death-rate during 1884 was lower than the mean in Khándesh, in the City of Bombay, Ahmednagar, Poona, Surat, Broach, Kaira, Shikárpur and Upper Sind Frontier.

By Districts.

By Collectorates.

100. Proceeding still further with the analysis of the localities in which these deaths from small-pox occurred as in the following table, we find that in the Urban Registration Circles with a population of 2,105,756 persons the millesimal death-rate from small-pox was 0·58 against 1·74 during the previous year, whilst in the Rural Circles with a population of 14,348,658 persons the rate was 0·92 against 0·68 in the previous year :—

Death-rates in urban and rural population.

Collectorates.	Urban and Rural.	Population.	1883.	1884.
Khándesh	Urban ..	49,465	2·98	...
	Rural ...	1,187,766	1·85	0·08
Násik	Urban ...	48,535	1·83	0·58
	Rural ...	732,671	0·59	0·78
Thána	Urban ...	27,366	1·32	0·04
	Rural ...	780,001	1·89	0·67
Bombay	Urban ...	773,196	1·85	0·14
	Rural ...	.....	...	...
Kolába	Urban ...	23,531	3·40	0·60
	Rural ...	459,299	0·85	0·58
Ahmednagar	Urban ...	46,288	2·96	...
	Rural ...	704,940	0·30	0·07
Poona	Urban ...	147,376	1·83	0·11
	Rural ...	753,245	1·27	0·39
Sholápur	Urban ...	92,926	0·30	1·68
	Rural ...	489,561	0·06	0·42
Sátára	Urban ...	51,482	0·56	1·53
	Rural ...	1,010,868	0·35	1·12
Ratnágiri	Urban ...	21,563	4·03	6·17
	Rural ...	975,527	0·93	1·06
Belgaum	Urban ...	54,190	1·48	3·40
	Rural ...	809,824	0·44	2·84
Dhárwár	Urban ...	91,071	0·46	2·62
	Rural ...	791,836	0·57	2.92
Kaládgi	Urban ...	7,024	0·43	4·70
	Rural ...	631,469	1·02	2·80
Kánara	Urban ...	24,390	1·23	5·33
	Rural ...	397,450	0·29	2·96
Surat	Urban ...	123,073	6·59	..
	Rural ...	491,125	1·08	0·13
Broach	Urban ...	48,760	2·07	...
	Rural ...	278,170	0·14	0·04
Kaira	Urban ...	67,614	0·15	0·64
	Rural ...	737,186	...	0·12

Collectorates.	Urban and Rural.	Population.	1883.	1884.
Panch Mahâls	Urban ...	25,736	0·78	0·62
	Rural ...	229,743	0·05	0·25
Ahmedabad	Urban ...	171,390	0·06	0·16
	Rural ...	684,934	0·08	0·34
Karáchi	Urban ...	68,332	1·42	0 10
	Rural ...	410,356	0·42	0·46
Hyderabad	Urban ...	45,195	2·72	0·24
	Rural ...	709,429	0·53	1·04
Thar and Párkar	Urban ...	2,828	...	...
	Rural ...	200,516	0·06	0·26
Shikárpur	Urban ...	83,073	0·05	0·04
	Rural ...	769,913	...	0·03
Upper Sind Frontier	Urban ...	11,352	...	0·09
	Rural ...	112,829	...	0·04
Presidency ...	Urban ...	2,105,756	1·74	0·58
	Rural ...	14,348,658	0·68	0·92

Death-rate in towns and cantonments compared with Collectorates.

101. Localizing the disease still further, the following table shows the death-rate in each town and cantonment circle. Kumta in Kánara Collectorate heads the list with the extremely high death-rate of 11·29 per 1,000 of population, the Zilla rate being also the high one of 3·10. Vengurla in Ratnágiri Collectorate comes next with a rate of 11·06, the Zilla rate being 1·17. Belgaum stands third with a rate of 6·10, against 2·87 the Collectorate rate. Kaládgi Town has the high rate of 4·70 against a Zilla rate of 2·82. In the three towns in the Dhárwár Collectorate, *viz.*, Gadag Bettigeri (2·82), Hubli (2·81) and Dhárwár (2·50) there is only slight difference compared with the Zilla ratio of 2·88. The following towns have also a high rate:—Kapadvanj 2·77, Ratnágiri 2·69, Sholápur 2·27, Karád 2·13, Mahád 2·06, Ránebennur 1·96, Gogha 1·70, Gokák 1·65, Athni 1·52, Wái 1·46, Sátára 1·34, Bársi, 1·24, and Godhra 1·12:—

Collectorates.	Death-rate from Small-pox by Zillas in 1884.	Town Circles and Cantonment Circles.	Death-rate of Towns and Cantonments in 1884.
Khándesh	0·08	Dhulia	...
		Nandurbár...	...
		Chopda	...
		Nasirabad	...
Násik	0·77	Násik	0·50
		Yeola	0·90
		Devláli Cantonment	...
		Málegaon Do.	...
Thána	0·65	Thána	...
		Kalyán	0·08
Bombay	0·14	Bombay	0·14
Kolába	0·59	Panvel	...
		Alibág	...
		Mahád	2·06
Ahmednagar	0·07	Ahmednagar	...
		Sangamner	...
		Ahmednagar Cantonment... ...	...
Poona	0·34	Poona	0·15
		Junnar	...
		Poona Cantonment	0·03
		Kirkee do.	...
Sholápur	0·62	Sholápur	2·27
		Bársi	1·24
		Pandharpur	...

Collectorates.	Death-rate from Small-pox by Zillas in 1884.	Town Circles and Cantonment Circles.	Death-rate of Towns and Cantonments in 1884.
Sátára	1·15	Sátára	1·34
		Wái	1·46
		Karád	2·13
Ratnágiri	1·17	Vengurla	11·06
		Ratnágiri	2·69
Belgaum	2·87	Belgaum	6·10
		Gokák	1·65
		Athni	1·52
		Belgaum Cantonment	0·94
Dhárwár	2·88	Dhárwár	2·50
		Hubli	2·81
		Gadag Bettigeri	2·82
		Ránebennur	1·96
Kaládgi	2·82	Kaládgi	4·70
Kánara	3·10	Kárwár	0·73
		Kumta	11·29
Surat	0·10	Surat	...
		Bulsár	...
Broach	0·03	Broach	...
		Jambusar	...
Kaira	0·17	Kaira	0·08
		Nadiád	0·07
		Borsad	...
		Kapadvanj	2·77
Pauch Maháls	0·29	Godhra	1·12
		Dohad	0·08
Ahmedabad	0·30	Ahmednagar	0·02
		Gogha	1·70
		Viramgám	0·63
		Dholka	...
		Ahmedabad Cantonment... ...	...
Karáchi	0·41	Karáchi	0·10
Hyderabad	0·99	Hyderabad	0·24
Thar and Párkar	0·26	Umarkot	...
Shikárpur	0·03	Shikárpur	0·05
		Sukkur	0·04
		Lárkhána	...
Upper Sind Frontier	0·05	Jacobabad Town and Cantonment Circle	0·09

Deaths by ages.

102. In the following table the deaths are shown by age and months, the latter being contrasted with the corresponding months of 1883 and with the mean of the previous five years. In 1884, 25·8 per cent. of these deaths occurred among infants under one year of age, whilst 37·6 per cent. took place among children over 1 (one) and under 12, the remaining 36·6 per cent. being among persons over that age :—

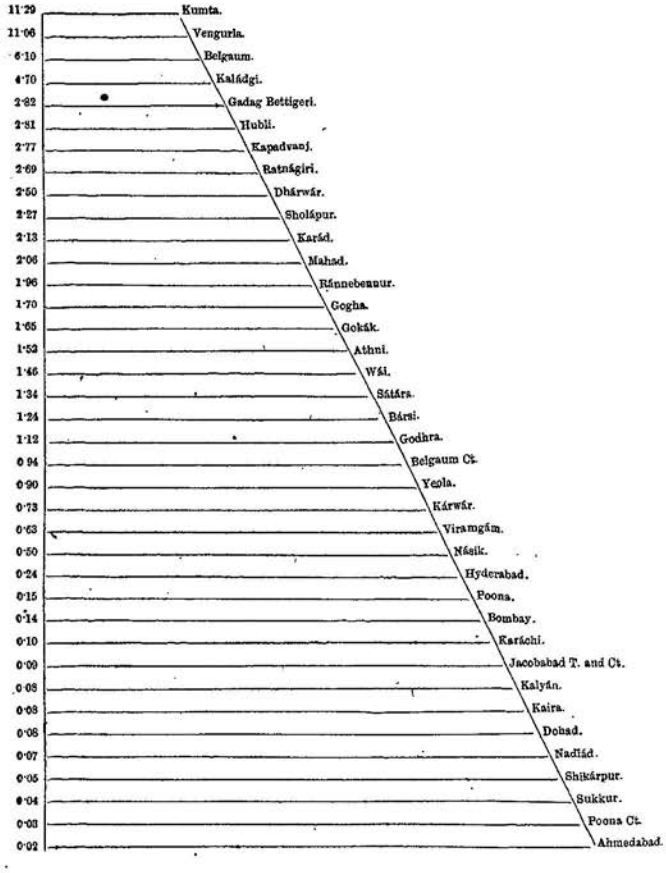
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Total deaths from small-pox in each month.	5 years' mean ..	266	456	661	533	359	255	157	132	110	88	140	327	3,534
	1883	1,039	1,047	2,814	2,228	1,296	850	616	460	393	302	446	1,003	13,404
	1884	1,835	2,211	2,413	2,564	1,856	1,387	812	500	228	200	223	399	14,438
Deaths under 1 year.	5 years' mean ..	78	141	221	185	111	73	54	41	35	27	37	88	1,001
	1883	242	634	692	795	439	268	213	168	132	103	138	319	4,544
	1884	574	601	696	662	486	260	147	93	66	40	39	69	3,723
Above 1 and under 12 years.	5 years' mean ..	138	246	339	279	173	112	71	60	70	36	56	145	1,725
	1883	681	1,089	1,573	1,189	672	382	248	221	198	143	190	476	6,900
	1884	820	888	886	887	693	374	320	189	115	70	58	123	5,423
Above 12 years ..	5 years' mean ..	50	69	81	89	75	70	62	31	25	25	47	94	718
	1883	116	222	249	244	185	180	155	71	65	56	118	238	1,900
	1884	441	722	831	815	677	753	345	227	147	81	126	127	5,292

Monthly distribution.

103. In December 1883, 1,033 deaths were registered throughout the Presidency, and in January (1884) the number rose to 1835, and reached its maximum intensity 2,413 in March. The disease then commenced to decline, and the minimum was registered in October; but the setting in of the cold weather, as usual, appears to favour the development of the poison, as the deaths from small-pox rose in December to 309 or 109 above the number recorded in the month of October.

Small-pox Diagram.

104. The following diagram shows at a glance the death-rate from small-pox in each town and Cantonment in the Presidency arranged in sequence from highest to lowest rate :—



FEVER.

Fever mortality by sexes.

105. During 1884, 144,596 males and 132,393 females, or a total of 276,989 persons, were reported to have died from fever. The increase therefore for the year under report as compared with 1883 amounted to 10,248 deaths, the mean for the previous 10 years being 263,385.

Deaths since 1873.

106. The number of deaths registered from fever in each year since 1873 is as follows :—

Years.	Number of Deaths from Fever.	Years.	Number of Deaths from Fever.
1873	188,201	1879	286,526
1874	183,717	1880	246,779
1875	219,156	1881	272,403
1876	220,833	1882	243,454
1877	336,865	1883	266,741
1878	357,376	1884	276,989
Total for six years ...	1,506,148	Total for six years ...	1,592,892
Mean ...	251,025	Mean ...	265,482

The total deaths from fever in the six years ending 1884 is greater by 86,744 than the aggregate deaths from this disease in the first six years.

Deaths by Districts and Collectorates.

107. In the following table these deaths are shown by Districts and Collectorates :—

Districts.	Number.	Collectorates.	Population according to Census of 1881.	Deaths from Fever in: Mean for 10 years 1874 to 1883.	Ratio per 1,000 of Population.	1883.	Ratio per 1,000 of Population on Census of 1881.	1884.	Ratio per 1,000 of Population on Census of 1881.
Western Registration District.	1	Khándesh	1,237,231	18,949	17·36	30,569	24·71	21,367	17·27
	2	Násik	781,206	13,908	18·68	16,486	21·12	14,454	18·54
	3	Thána	807,367	12,923	16·74	15,467	19·14	15,845	19·63
	4	Bombay	773,196	7,249	10·61	5,775	7·47	6,801	8·80
	5	Kolába	482,830	6,101	13·45	7,679	15·90	7,607	15·76
Central Registration District.	6	Ahmednagar	751,228	13,867	18·07	15,606	20·27	14,327	19·07
	7	Poona	900,621	13,544	14·96	14,480	16·08	15,786	17·53
	8	Sholápur	582,487	10,724	18·33	10,897	18·71	10,892	18·70
	9	Sátára	1,062,350	19,051	17·95	17,980	16·93	21,369	20·11
	10	Ratnágiri	997,090	9,605	9·58	8,398	8·42	8,036	8·06
Southern Registration District.	11	Belgaum	864,014	15,249	16·64	9,565	11·07	12,138	14·05
	12	Dhárwár	882,907	17,789	18·59	10,340	11·71	12,782	14·42
	13	Kaládgi	638,493	13,608	17·96	8,318	13·03	8,912	13·96
	14	Kánara	421,840	7,678	18·94	6,385	15·09	6,827	16·18
Eastern Gujarát Registration District.	15	Surat	614,198	11,777	19·33	13,679	22·27	13,296	21·65
	16	Broach	326,939	8,176	23·82	7,569	23·12	9,388	28·72
	17	Kaira	804,300	17,627	22·33	16,170	20·09	18,760	22·69
	18	Panch Mahále	255,479	4,116	16·79	3,974	15·56	4,214	16·88
	19	Ahmedabad	856,324	17,659	21·03	15,885	18·55	19,681	22·98
Sind Registration District.	20	Karáchi	478,688	5,199	11·81	5,148	10·75	5,931	12·39
	21	Hyderabad	754,624	7,252	9·91	9,188	12·18	9,899	13·13
	22	Thar ann Párkar	293,344	2,282	12·17	3,630	17·35	2,844	13·99
	23	Shikárpur	862,986	8,147	10·19	12,541	14·70	14,500	17·00
	24	Upper Sind Frontier	124,181	722	7·23	1,051	8·47	1,753	14·12

ABSTRACT.

1	Western Registration District	4,081,830	59,130	15·88	75,966	18·61	66,104	16·19
2	Central " "	4,293,776	66,881	15·12	67,361	15·69	79,410	16·40
3	Southern " "	2,807,254	54,414	17·89	34,588	12·32	40,609	14·47
4	Eastern Gujarát "	2,857,731	59,355	21·01	57,268	20·04	64,939	22·72
5	Sind " "	2,413,823	23,605	10·45	31,558	11·42	34,927	14·47
	Presidency ..	16,454,414	263,385	16·10	265,741	16·21	276,989	16·83

By Districts.

In all the districts excepting the Western fever has caused higher mortality during the year than in 1883. In the Eastern Gujarát Registration District the fever death-rate was the high one of 22·72 per 1,000 of population against 20·04 in 1883 and 20·01 during the previous ten years. In the Central Registration District, the ratio was 16·40 against 15·69 in 1883 and 15·12, the decennial mean. In the Western Registration District the ratio, 16·19, was nearly as high as in the Central Registration District, but it was lower than the previous year, 18·61, though higher than the decennial mean, 15·88. The ratios in the Southern and Sind Registration Districts were exactly the same, 14·47, during the year, and both were higher than in 1883, but in the Southern Registration District it was lower than the decennial mean, 17·89.

By Collectorates.

The Collectorate of Broach heads the list with a millesimal rate of 28·72 per 1,000 of population against 23·12 in 1883 and 23·82 in the previous ten years, and the following

Collectorates have also high rates:—Ahmedabad 22·98, Kaira 22·69, Surat 21·65, Sátára 20·11, Thána 19·63, Ahmednagar 19·07, Sholápur 18·70, Násik 18·54, Poona 17·53, Khándesh 17·27, Shikárpur 17·00, Panch Maháls 16·88, Kánara 16·18, Kolába 15·76, Dhárwár 14·42, Upper Sind Frontier 14·12, Belgaum 14·05, Thar and Párkar 13·99, Kaládgi 13·96, Hyderabad 13·13 and Karáchi 12·39.

Death-rates in urban and rural population.

108. The next table shows the deaths from fever arranged according to urban and rural registration Collectorates, and it will be seen from it that in only 7 Collectorates, *viz.* Sholápur, Kaira, Ahmedabad, Hyderabad, Thar and Párkar, Shikárpur and Upper Sind Frontier, the urban rate is higher than the rural. For the Presidency the death-rate from fever in the urban Zillas amounted to 13·83 per 1,000 of population against 12·44 in the previous year, but among the rural population it amounted to 17·27 against 16·76 in 1883. This fact was pointed out in my report for 1883 as proving the necessity for improving village sanitation :—

Collectorates.	Urban and Rural.	Population.	1883.	1884.
Khándesh	Urban ...	49,465	17·20	12·84
	Rural ...	1,187,766	25·02	17·85
Násik	Urban ...	48,535	17·86	15·86
	Rural ...	732,671	21·32	15·74
Tháná	Urban ...	27,366	9·68	18·96
	Rural ...	780,001	19·48	13·82
Bombay	Urban ...	773,196	7·47	9·80
	Rural ...	.....	...	...
Kolába...	Urban ...	23,531	17·84	6·67
	Rural ...	459,299	16·24	16·22
Ahmednagar	Urban ...	46,288	9·32	11·08
	Rural ...	704,940	21·53	19·60
Poona	Urban ...	147,376	9·84	10·30
	Rural ...	753,245	17·30	18·94
Sholápur	Urban ...	92,926	24·86	22·97
	Rural ...	489,561	17·54	17·88
Sátára	Urban ...	51,482	13·25	14·70
	Rural ...	1,010,868	17·11	20·39
Ratnágiri	Urban ...	21,563	7·56	6·86
	Rural ...	975,527	8·44	8·09
Belgaum	Urban ...	54,190	7·49	8·62
	Rural ...	809,824	11·31	14·41
Dhárwár	Urban ...	91,071	7·89	8·81
	Rural ...	791,836	12·15	15·07
Kaládgi	Urban ...	7,024	5·41	3·99
	Rural ...	631,469	13·11	14·07
Kánara	Urban ...	24,390	9·51	9·80
	Rural ...	397,450	15·43	16·57
Surat	Urban ...	123,073	15·62	16·38
	Rural ...	491,125	23·94	22·97
Broach...	Urban ...	48,760	15·63	23·40
	Rural ...	278,170	24·44	29·65
Kaira	Urban ...	67,614	25·10	26·34
	Rural ...	737,186	19·63	22·35
Panch Maháls	Urban ...	25,736	12·86	14·73
	Rural ...	229,743	15·86	17·13
Ahmedabad	Urban ...	171,390	22·76	29·87
	Rural ...	684,934	17·49	21·26
Karáchi	Urban ...	68,332	12·56	10·90
	Rural ...	410,356	10·45	12·64
Hyderabad	Urban ...	45,195	17·44	14·85
	Rural ...	709,429	11·84	13·01
Thar and Párkar	Urban ...	2,828	30·76	26·17
	Rural ...	200,516	17·67	13·81
Shikárpur	Urban ...	83,073	16·01	19·86
	Rural ...	769,913	14·56	16·69
Upper Sind Frontier ...	Urban ...	11,352	9·78	18·15
	Rural ...	112,829	8·33	13·71
Presidency ...	Urban ...	2,105,756	12·44	13·83
	Rural ...	14,348,658	16·76	17·27

Death-rates in towns and cantonments compared with the rate of the Zilla in which they are situated.

109. The next table shows the death-rate from fever in towns and cantonments as compared with the rates of the Zillas in which they are situated :—

Collectorates.	Death-rate of Collectorates in 1884.	Town Circles and Cantonment Circles.	Death-rate of Towns and Cantonments in 1884.
Khándesh	17·27	Dhulia	9·70
		Nandurbár	15·35
		Choptda	13·35
		Nasirabad	16·11
Násik	18·54	Násik	17·26
		Yeola	15·38
		Devláli Cantonment	3·37
		Málegaon do.	15·08
Thána	19·63	Thána	17·22
		Kalyán	10·30
Bombay	8·80	Bombay	8·80
Kolába	15·76	Panvel	4·44
		Alibág	8·94
		Mahád	7·94
Ahmednagar...	19·07	Ahmednagar	11·37
		Sangamner	13·08
		Ahmednagar Cantonment ...	5·23
Poona	17·53	Poona	10·19
		Junnar	10·03
		Poona Cantonment	11·95
		Kirkee do.	5·38
Sholápur	18·70	Sholápur	21·85
		Bársi	20·96
		Pandharpur	28·86
Sátára	20·11	Sátára	13·47
		Wái	19·78
		Karád	12·53
Ratnágiri	8·06	Vengurla...	4·02
		Ratnágiri	8·88
Belgaum	14·05	Belgaum	8·83
		Gokák	9·02
		Athni	9·66
		Belgaum Cantonment	6·47
Dhárwár	14·42	Dhárwár	9·42
		Hubli	7·96
		Gadag Bettigeri	9·71
		Ránebennur	8·72
Kaládgi	13·96	Kaládgi	3·99
Kánara	16·18	Kárwár	8·21
		Kumta	11·85
Surat	21·65	Surat	17·54
		Bulsár	6·73
Broach	28·72	Broach	25·75
		Jambusar...	15·77
Kaira	22·69	Kaira	23·97
		Nadiád	29·82
		Borsad	19·05
		Kapadvanj	27·77
Panch Maháls	16·88	Godhra	13·94
		Dohad	15·57
Ahmedabad	22·98	Ahmedabad	32·16
		Gogha	14·87
		Viramgám	42·60
		Dholka	9·60
		Ahmedabad Cantonment ...	8·05
Karáchi	12·39	Karáchi	10·90
Hyderabad	13·13	Hyderabad	14·85
Thar and Párkar	13·99	Umarkot	26·17
Shikárpur	17·00	Shikárpur	18·14
		Sukkur	16·54
		Lárkhána...	32·30
Upper Sind Frontier	14·12	Jacobabad Town & Cantonment Circle	18·15

The highest death-rate from fever is reported to have occurred at Viramgám, a town in the Ahmedabad Collectorate, where it attained the enormously high rate of 42·60 per 1,000 of population against a Zilla rate of 22·98. In only 14 towns situated in 8 different Collectorates, excluding the City of Bombay, the death-rate from fever is higher than the average death-rate of the Zilla. In the Sholápur Collectorate there are three towns, *viz.* Sholápur, Bársi and Pandharpur, and in all, the town rate is higher than in the Collectorate. In the town of Ratnágiri the death-rate from fever is higher than that of the Zilla. In Kaira Collectorate, with the exception of Borsad, the town rate is higher than the average death-rate of the Zilla. In the Ahmedabad Collectorate in the towns of Ahmedabad and Viramgám the rate is much higher than the average district rate. In Hyderabad the rate is higher by 1·72 than the Zilla rate. In Umarkot it is nearly double that of the Zilla rate. In the two towns of the Shikárpur Collectorate, *viz.*, Shikárpur and Lárkhána, the rate is higher than Zilla rate, so also Jacobabad has a higher rate than that of the Collectorate. The attention of the Municipal authorities is invited to the above fact, and they should lose no time in investigating the local causes of the high mortality from fever within their municipal limits.

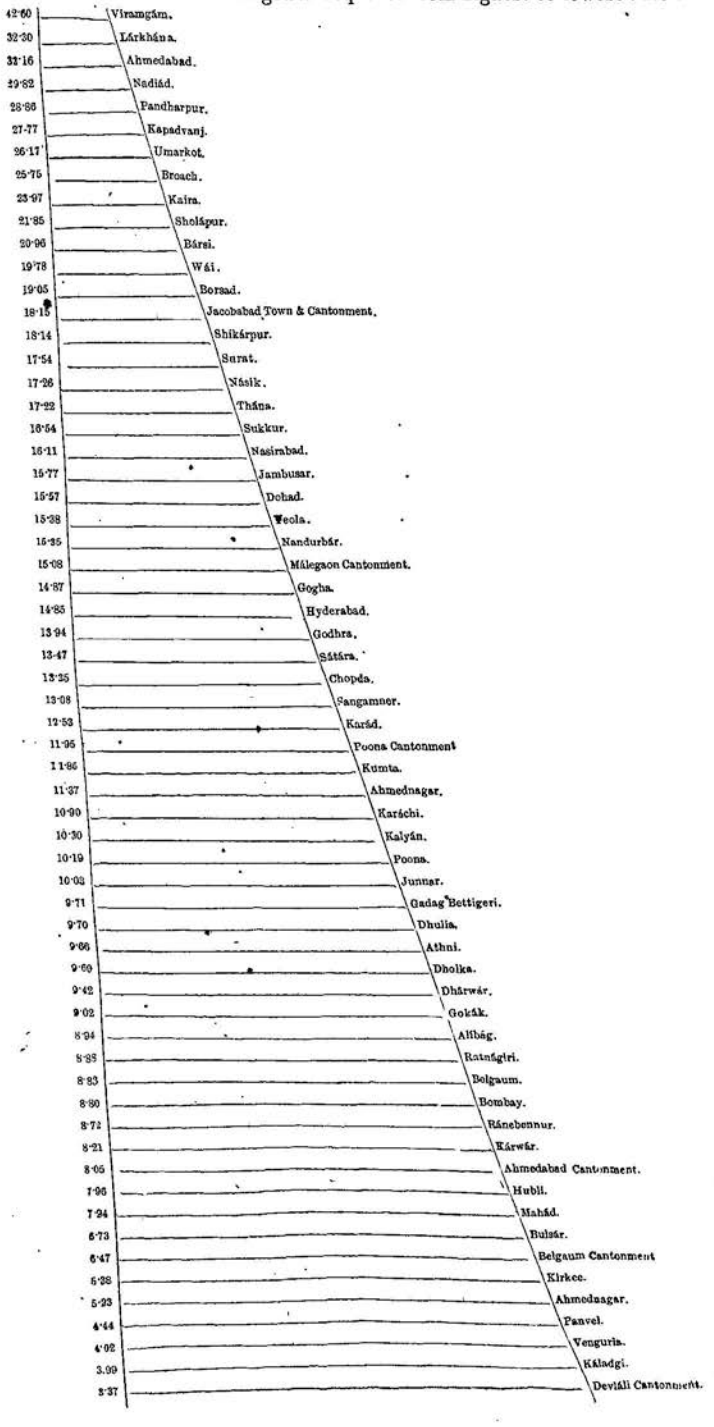
110. The table in the margin shows the monthly distribution of these deaths as compared with the mean and the corresponding months of 1883. In the month of May and from September to December the deaths from fever were above both the mean and the corresponding months in 1883. In February, March, April and June the deaths from fever were above the mean but below the corresponding months in the previous year. In January, July and August, they were both below the mean and the corresponding months in 1883. The maximum mortality from fever took place in the month of November when 31,512 deaths were reported and the minimum in the month of June when 18,498 were recorded.

Deaths by months.

Months.	Mean for 10 years (1874 to 1883).	1883.	1884.
January ..	22,664	23,513	23,510
February ..	19,393	21,114	20,290
March	20,640	22,869	22,996
April	19,751	22,385	20,469
May	19,505	20,512	20,673
June	18,259	20,700	18,498
July	20,944	23,106	18,902
August	23,543	23,703	22,273
September ..	23,137	20,755	23,482
October	23,697	19,144	27,767
November ..	20,745	23,787	31,512
December ..	25,207	25,153	28,537
	2,63,385	2,66,741	2,76,989

111. The following diagram shows at a glance the death rate from fever in each town and cantonment in the Presidency arranged in sequence from highest to lowest rate :—

Fever Diagram.



BOWEL-COMPLAINTS.

Deaths from bowel-complaints by sexes.

112. During 1884, bowel-complaints caused the deaths of 19,953 males and of 16,030 females, or a total of 35,983 persons against 35,292 in 1883 and a decennial mean of 34,053.

Deaths since 1873.

113. The number of deaths reported from bowel-complaints in each year since 1873 is as follows :—

Years.	Number of Deaths from Bowel-complaints.	Years.	Number of Deaths from Bowel-complaints.
1873	26,259	1879	26,349
1874	26,990	1880	24,462
1875	33,650	1881	30,342
1876	33,683	1882	28,353
1877	60,257	1883	35,292
1878	41,165	1884	35,983
Total for 6 years ...	2,22,004	Total for 6 years ...	180,771
Mean ...	37,001	Mean ...	30,128

Deaths by Districts and Collectorates.

114. The following table shows these deaths arranged by Districts and Collectorates :—

Districts.	Number.	Collectorates.	Population according to Census of 1881.	Deaths from Bowel-complaints in: Mean for 10 years from 1874 to 1883.	Ratio per 1,000 of Population.	1883.	Ratio per 1,000 of Population on Census of 1881.	1884.	Ratio per 1,000 of Population on Census of 1881.
Western Registration District.	1	Khándesh	12,37,231	3,793	3·48	6,362	5·14	4,236	3·50
	2	Násik	7,81,204	1,699	2·26	2,493	3·19	1,938	2·48
	3	Thána	8,07,[illegible]67	276	0·36	2[illegible]8	0·36	273	0·34
	4	Bombay	7,73,194	2,18[illegible]	3·20	1,769	2·29	1,672	2·16
	5	Kolába	4,32,830	211	0·46	75	0·15	325	0·67
Central Registration District.	6	Ahmednagar	7,51,228	2,047	2·67	2,477	3·30	1,903	2·53
	7	Poona	9,60,621	1,638	1·69	1,625	1·69	1,764	1·96
	8	Sholápur	5,82,487	1,723	2·54	1,327	2·28	1,197	2·06
	9	Sátára	10,62,350	2,730	1·62	1,959	1·84	2,016	1·90
	10	Ratnágiri	9,97,090	1,470	1·45	670	0·67	1,034	1·04
Southern Registration District.	11	Belgaum	8,84,014	3,084	3·26	3,919	4·53	4,689	5·43
	12	Dhárwár	8,82,907	4,017	4·83	3,763	4·26	4,704	5·33
	13	Kaladgi	6,33,493	1,453	1·94	1,293	2·03	1,497	2·50
	14	Kánara	4,21,840	1,163	2·87	799	1·89	762	1·81
Eastern Gujarát Registration District.	15	Surat	6,14,198	1,458	2·39	1,8[illegible]3	2·98	1,811	2·95
	16	Broach	3,26,930	551	1·69	610	1·87	622	1·90
	17	Kaira	8,64,800	1,983	2·31	2,159	2·68	2,671	3·32
	18	Panch Máhals	2,55,479	305	1·24	94	0·37	115	0·47
	19	Ahmedabad	8,56,324	1,273	1·52	1,265	1·48	1,926	2·25
Sind Registration District.	20	Karáchi	4,78,688	127	0·29	191	0·40	183	0·38
	21	Hyderabad	7,54,[illegible]24	81	0·11	98	0·13	70	0·09
	22	Thar and Párkar	2,03,344	32	0·17	8	0·04	30	0·15
	23	Shikárpur	8,52,986	200	0·25	181	0·21	287	0·35
	24	Upper Sind Frontier	1,24,181	30	0·30	28	0·23	48	0·39

Abstract.

Western Registration District	40,81,830	8,158	2·18	10,987	2·69	8,544	2·09
Central " "	42,93,776	9,508	2·15	8,059	1·88	7,914	1·84
Southern " "	28,97,234	10,347	3·40	9,779	3·48	11,752	4·20
Eastern Gujarát " "	28,57,731	5,570	1·98	5,961	2·09	7,145	2·71
Sind " "	24,13,823	470	0·21	500	0·21	628	0·26
Presidency	1,64,54,414	34,053	2·09	35,292	2·14	35,983	2·19

By Districts.

The Southern Registration District heads the list with the very high ratio of 4·20 per 1,000 of population against 3·48 in 1883 and 3·40, the decennial mean. Gujarát comes next with a ratio of 2·71 and next to it is the Western Registration District, 2·09, and following it is the Central Registration District, 1·84, and the last of all Sind with a rate of 0·26 per 1,000. In the Presidency the rate was 2·19 against 2·14 in the pre-

vious year and a decennial mean of 2·09. The last three districts show a slight increase in the death ratios, whilst in the first two there was a slight decrease.

By Collectorates.

In Collectorates the highest ratios were recorded in Belgaum, 5·43, and Dhárwár, 5·33, and the lowest in Hyderabad, 0·09, and Thar and Párkar, 0·15.

Death-rates in urban and rural population.

115. The next table shows these deaths arranged by urban and rural registration circles in the Presidency. The ratios in each of which during the year were generally the same.

Collectorates.	Urban and Rural.	Population.	1883.	1884.
Khándesh	Urban ...	49,465	0·89	1·23
	Rural ...	11,87,766	5·32	3·60
Násik	Urban ...	48,535	4·43	2·84
	Rural ...	7,32,671	3·11	2·45
Thána	Urban ...	27,366	0·04	0·22
	Rural ...	7,80,001	0·37	0·34
Bombay	Urban ...	7,73,196	2·29	2·16
	Rural ...	.....	...	...
Kolába	Urban ...	23,531	0·17	0·09
	Rural ...	4,59,299	0 15	0·70
Ahmednagar	Urban ...	46,288	2·81	2·70
	Rural ...	7,04,940	3·33	2·52
Poona	Urban ...	1,47,376	1·82	17·30
	Rural ...	7,53,245	1·80	2·00
Sholápur...	Urban ...	92,926	4·79	3·79
	Rural ...	4,89,561	1·80	1·73
Sátára	Urban ...	51,482	3·17	4·88
	Rural ...	10,10,868	1·78	1·75
Ratnágiri	Urban ...	21,563	1·53	0·46
	Rural ...	9,75,527	0·65	1·05
Belgaum	Urban ...	54,190	4·80	4·54
	Rural ...	8,09,824	4·52	5·49
Dhárwár	Urban ...	91,071	4·53	3·23
	Rural ...	7,91,836	4·23	5·57
Kaládgi	Urban ...	7,024	5·69	2·85
	Rural ...	6,31,469	1·99	2·49
Kánara	Urban ...	24,390	0·94	1·27
	Rural ...	3,97,450	1·95	1·84
Surat	Urban ...	1,23,073	0·42	0·54
	Rural ...	4,91,125	3·62	3·55
Broach	Urban ...	48,760	5·64	5·50
	Rural ...	2,78,170	1·20	1·27
Kaira	Urban ...	67,614	1·17	2·39
	Rural ...	7,37,186	2·82	3·40
Panch Mahála	Urban ...	25,736	0·43	0·78
	Rural ...	2,29,743	0·36	0·41
Ahmedabad	Urban ...	1,71,390	1·60	2·66
	Rural ...	6,84,934	1·45	2·15
Karáchi	Urban ...	68,332	1·29	1·08
	Rural ...	4,10,356	0·25	0·26
Hyderabad	Urban ...	45,195	0·42	0·02
	Rural ...	7,09,429	0·11	0·10
Thar and Párkar	Urban ...	2,828	0·71	0·35
	Rural ...	2,00,516	0·03	0·14
Shikárpur	Urban ...	83,073	...	0·88
	Rural ...	7,69,913	0·18	0·29
Upper Sind Frontier	Urban ...	11,352	1·23	2·03
	Rural ...	1,12,829	0·12	0·22
Presidency ...	Urban ...	21,05,756	2·22	2·19
	Rural ...	1,43,48,658	2·13	2·19

Death-rates from bowel-complaints in towns and cantonments compared with Collectorates.

116. The following table shows the death-rates in town and cantonment circles :—

Collectorates.	Death-rate of Collectorates in 1884.	Town Circles and Cantonment Circles.	Death-rate of Towns and Cantonments in 1884.
Khándesh	3·50	Dhulia	1·30
		Nandurbár	5·26
		Chopda	...
		Nasirabad	0·10
Násik...	2·48	Násik	4·35
		Yeola	1·75
		Deoláli Cantonment	0·34
		Málegaon do.	0·26
Thána	0·34	Thána	0·14
		Kalyán	0·31
Bombay	2·16	Bombay	2·16
Kolába	0·67	Panvel	0·10
		Alíbag	...
		Mahád	0·14
Ahmednagar...	2·53	Ahmednagar	3·58
		Sangamner	0·34
		Ahmednagar Cantonment ...	0·87
Poona	1·96	Poona	1·75
		Junnar	2·31
		Poona Cantonment	1·46
		Kirkee do.	1·79
Sholápur	2·06	Sholápur	1·67
		Bársi	2·67
		Pandharpur	12·36
Sátára	1·90	Sátára	5·41
		Wái	3·17
		Karád	5·29
Ratnágiri	1·04	Vengurla...	0·45
		Ratnágiri...	0·47
Belgaum	5·43	Belgaum	1·69
		Gokák	6·99
		Athni	9·66
		Belgaum Cantonment	2·82
Dhárwár	5·33	Dhárwár	0·40
		Hubli	3·54
		Gadag Bettigeri	7·65
		Ránebennur	2·25
Kaládgi	2·50	Kaládgi	2·85
Kárwár	1·81	Kárwár	0·58
		Kumta	2·16
Surat...	2·95	Surat	0·45
		Bulsár	1·36
Broach	1·90	Broach	0·03
		Jambusar	23·26
Kaira...	3·32	Kaira	4·51
		Nadiád	0·04
		Borsad	0·17
		Kapadvanj	7·06
Panch Maháls	0·45	Godhra	0·75
		Dohad	0·81
Ahmedabad	2·25	Ahmedabad	0·59
		Gogha	11·18
		Viramgám	12·48
		Dholka	3·73
		Ahmedabad Cantonment ...	0·35
Karáchi	0·38	Karáchi	1·08
Hyderabad	0·09	Hyderabad	0·02
Thár and Párkar	0·15	Umarkot	0·35
Shikárpur	0·35	Shikárpur	0·47
		Sukkur	1·72
		Lárkhána	0·45
Upper Sind Fronter...	0·39	Jacobabad Town and Cantonment Circle.	2·03

In the 5 Collectorates of Thána, Kolába, Ratnágiri, Surat and Hyderabad, the death-rates from bowel-complaints are lower in the towns than in the rural circles, and out of the 18 remaining Collectorates in only 28 towns is the urban rate in excess of the rural circles. The extremely high rate of 23·26 per 1,000 is reported from the town of Jambusar in the Broach Collectorate. Viramgám and Pandharpur have also very high rates, 12·48 and 12·36 respectively, whilst the following towns had also high rates :—Gogha 11·18, Athni 9·66, Gadag Bettigeri 7·65, Kapadvanj 7·06, Gokák 6·99, Sátára 5·41, Karád 5·29 and Nandurbár 5·26.

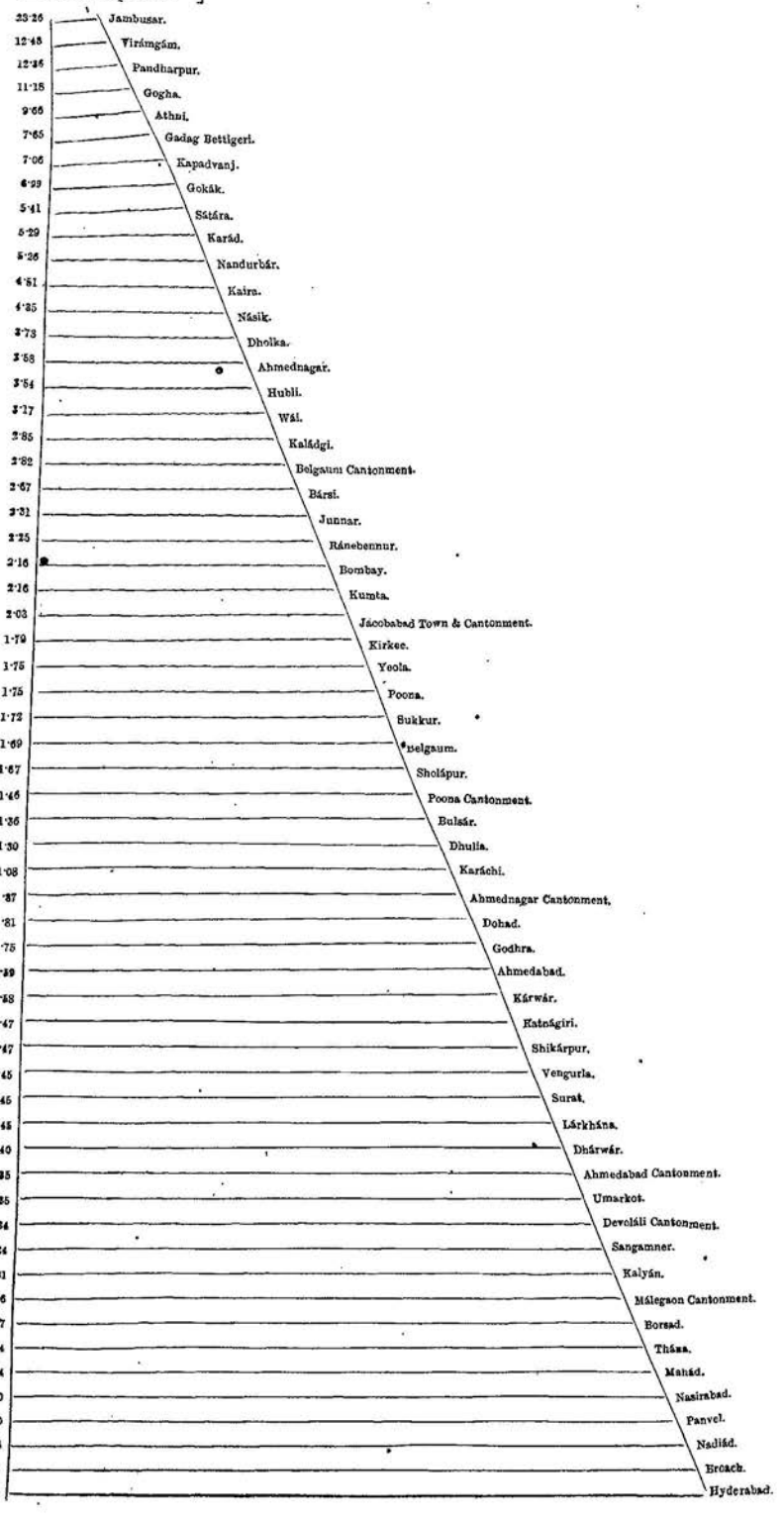
Deaths by months.

117. The marginal table shows the monthly distribution of these deaths as compared with the mean and the corresponding months of 1883. During each month of the year excepting May, June, July and August the deaths from bowel-complaints were more than in 1883, but they were less in February, September and October than the decennial mean. The maximum mortality was observed in the month of September and the minimum in February.

Months.	Mean for 10 years (1874 to 1883).	1883.	1884.
January	2,469	2,406	2,728
February	2,396	2,100	2,149
March	1,997	2,211	2,321
April	2,220	2,403	2,409
May	2,259	2,683	2,569
June	2,542	2,990	2,556
July	2,777	4,149	2,933
August	3,454	4,450	3,823
September	4,220	3,374	3,849
October	3,845	2,891	3,732
November	3,166	2,790	3,530
December	2,708	2,845	3,384
Total ...	34,053	35,292	35,983

Bowel-complaints, Diagram.

118. The following diagram shows at a glance the death-rate from bowel-complaints in each town and cantonment in the Presidency arranged in sequence from highest to lowest rate :—


23·26 Jambusar.
12·48 Virámgám.
12·46 Pandharpur.
11·18 Gogha.
9·66 Athni.
7·65 Gadag Bettigeri.
7·06 Kapadvanj.
6·99 Gokák.
5·41 Sátára.
5·29 Karád.
5·26 Nandurbár.
4·81 Kaira.
4·35 Násik.
3·73 Dholka.
3·58 Ahmednagar.
3·54 Hubli.
3·17 Wái.
3·85 Kaládgi.
2·82 Belgaum Cantonment.
2·67 Bársi.
2·31 Junnar.
2·25 Ránebennur.
2·16 Bombay.
2·16 Kumta.
2·03 Jácobabad Town & Cantonment.
1·79 Kirkee.
1·75 Yeola.
1·75 Poona.
1·72 Sukkur.
1·69 Belgaum.
1·67 Sholápur.
1·46 Poona Cantonment.
1·36 Bulsár.
1·30 Dhulia.
1·08 Karáchi.
·87 Ahmednagar Cantonment.
·81 Dohad.
·75 Godhra.
·49 Ahmedabad.
·48 Kárwár.
·47 Ratnágiri.
·47 Shikárpur.
·45 Vengurla.
·45 Surat.
·45 Lárkhána.
·40 Dhárwár.
·35 Ahmedabad Cantonment.
·35 Umarkot.
·34 Devcláli Cantonment.
·34 Sangamner.
·31 Kalyán.
·26 Málegaon Cantonment.
·17 Borsad.
·14 Thána.
·14 Mahád.
·10 Nasirabad.
·10 Panvel.
·04 Nadiád.
·02 Broach.
·03 Hyderabad.

INJURIES.

Deaths from injuries.

119. During 1884, 3,231 males and 2,339 females, or a total of 5,570 persons, met with violent deaths. The mortality from these causes is less by 408 than in 1883 when 5,978 deaths were recorded. Of the 5,570 deaths 2,461 were caused by drowning, 1,077 resulted from snake-bites, 415 from wounds, 213 by hanging, 121 by poisoning, 118 from attacks by wild beasts, and 1,165 from causes not specified.

Deaths since 1873.

120. The number of deaths registered from injuries in each year since 1873 was as follows :—

Years.	Number of Deaths from Injuries.	Years.	Number of Deaths from Injuries.
1873	5,951	1879	7,107
1874	6,165	1880	6,082
1875	6,217	1881	5,950
1876	5,928	1882	5,913
1877	7,539	1883	5,978
1878	7,550	1884	5,570
Total for 6 years ...	39,350	Total for 6 years ...	36,600
Mean ...	6,558		6,100

Deaths from injuries in 1883 and 1884 arranged by sex.

121. The results of the two last years arranged by sex are shown in the following table :—

	1883.			1884.		
	Males.	Females.	Total.	Males.	Females.	Total.
Drowning...	1,225	1,488	2,713	1,166	1,295	2,461
Poisoning...	74	56	130	77	44	121
Hanging	119	60	179	128	85	213
Wounding	252	103	355	299	116	415
Wild beasts	76	19	95	82	36	118
Snake-bites	815	400	1,215	678	399	1,077
Other causes	875	416	1,291	801	364	1,165
Total ...	3,436	2,542	5,978	3,231	2,339	5,570

It will be seen from the above table that during 1884 under hanging, wounding and injuries caused by wild beasts there is a total increase of 117 deaths, whilst under drowning, poisoning, snake-bites, and other causes there is an aggregate decrease of 525 deaths as compared with the results of 1883.

Deaths from injuries by districts and collectorates.

122. The next table gives the deaths from injuries for each district and collectorate for 1883 and 1884 and the mean for the previous ten years. The number of deaths during the year in all the collectorates is less than the previous year and the ten years' mean. In only 6 collectorates the deaths exceed the number of the previous year, in 17 they are below it, and in 1, *viz.* Panch Maháls, the number is the same as that of last year :—

Districts.	Number.	Collectorates.	Population according to Census of 1881.	Deaths from Injuries in: Mean for 10 years from 1874 to 1883.	Ratio per 1,000 of Population.	1883.	Ratio per 1,000 of Population on Census of 1881.	1884.	Ratio per 1,000 of Population on Census of 1881.
tern Registration District	1	Khándesh	1,237,251	288	0·27	285	0·23	280	0·23
	2	Násik	781,306	166	0·22	143	0·18	125	0·16
	3	Thána	807,387	305	0·51	359	0·44	363	0·45
	4	Bombay	779,196	321	0·47	339	0·44	302	0·39
	5	Kolába	482,830	166	0·37	187	0·39	156	0·32
tral Registration District	6	Ahmednagar	751,228	181	0·24	154	0·20	146	0·20
	7	Poona	900,621	304	0·34	291	0·32	353	0·39
	8	Sholápur	582,487	215	0·32	189	0·32	148	0·25
	9	Sátára	1,062,350	397	0·29	359	0·34	349	0·33
	10	Ratnágiri	997,090	413	0·41	400	0·40	353	0·35
uthern Registration District	11	Belgaum	884,014	362	0·39	271	0·31	293	0·34
	12	Dhárwár	882,907	388	0·41	288	0·33	235	0·27
	13	Kaládgi	638,493	325	0·43	219	0·34	193	0·30
	14	Kánara	421,840	223	0·55	195	0·46	192	0·45
Eastern Gujarát Registration District.	15	Surat	614,198	260	0·43	256	0·42	293	0·47
	16	Broach	326,930	131	0·38	130	0·40	114	0·35
	17	Kaira	804,800	331	0·42	346	0·43	317	0·39
	18	Panch Mahále	255,479	116	0·47	108	0·42	108	0·42
	19	Ahmedabad	856,324	247	0·30	207	0·24	190	0·22
Sind Registration District.	20	Karáchi	478,688	291	0·66	311	0·65	194	0·41
	21	Hyderabad	756,624	479	0·65	453	0·60	359	0·48
	22	Thar and Párkar	209,344	85	0·45	101	0·50	92	0·45
	23	Shikárpur	852,986	314	0·39	364	0·43	387	0·45
	24	Upper Sind Frontier	124,181	35	0·35	23	0·18	26	0·21

Abstract.

Western Registration District	4,081,830	1,346	0·33	1,313	0·32	1,226	0·30
Central do.	4,293,776	1,510	0·34	1,393	0·33	1,349	0·31
Southern do.	2,807,254	1,298	0·43	973	0·35	915	0·33
Eastern Gujarát do.	2,257,731	1,065	0·38	1,047	0·36	1,022	0·36
Sind do.	2,413,823	1,204	0·54	1,252	0·52	1,058	0·44
Total ..	16,454,414	6,443	0·40	5,978	0·36	5,570	0·34

Death-rates in urban and rural population.

123. In the following table these deaths are arranged according to urban and rural registration circles in each collectorate, and it will be seen from it that there is only a difference of 0·03 between the collective ratios of urban and rural population, and there is an equal decrease of 0·03 in both the urban and rural ratios of this year compared with the previous year :—

Collectorates.	Urban and Rural.	Population.	1883.	1884.
Khándesh	Urban ...	49,465	0·22	0·20
	Rural ...	11,87,766	0·23	0·23
Násik	Urban ...	48,535	0·18	0·29
	Rural ...	7,32,671	0·18	0·15
Thána	Urban ...	27,366	0·40	0·40
	Rural ...	7,80,001	0·45	0·45
Bombay	Urban ...	7,73,196	0·44	0·39
	Rural ...	.....	...	...
Kolába	Urban ...	23,531	0·55	0·25
	Rural ...	4,59,299	0·39	0·33
Ahmednagar	Urban ..	46,288	0·24	0·30
	Rural ...	7,04,940	0·20	0·19
Poona	Urban ...	1,47,376	0·43	0·49
	Rural ...	7,53,245	0·30	0·37
Sholápur	Urban ...	92,926	0·51	0·30
	Rural ...	4,89,561	0·29	0·25
Sátára	Urban ...	51,482	0·35	0·27
	Rural ...	10,10,868	0·34	0·33
Ratnágiri...	Urban ...	21,563	0·32	0·14
	Rural ...	9,75,527	0·40	0·36
Belgaum	Urban ...	54,190	0·42	0·61
	Rural ...	8,09,824	0·31	0·32
Dhárwár	Urban ...	91,071	0·41	0·36
	Rural ...	7,91,836	0·32	0·25

Collectorates.	Urban and Rural.	Population.	1883.	1882.
Kaládgi	Urban ...	7,024	0·43	0·42
	Rural ...	6,31,469	0·34	0·30
Kánara	Urban ...	24,390	0·16	0·25
	Rural ...	3,97,450	0·48	0·47
Surat	Urban ...	1,23,073	0·26	0·38
	Rural ...	4,91,125	0·46	0·50
Broach	Urban ...	48,760	0·51	0·37
	Rural ...	2,78,170	0·38	0·34
Kaira	Urban ...	67,614	0·40	0·38
	Rural ...	7,37,186	0·43	0·39
Panch Maháls	Urban ...	25,736	0·54	0·54
	Rural ...	2,29,743	0·40	0·41
Ahmedabad	Urban ...	1,71,390	0·18	0·15
	Rural ...	6,84,934	0·26	0·24
Karáchi	Urban ...	68,332	0·41	0·31
	Rural ...	4,10,356	0·69	0·42
Hyderabad	Urban ...	45,195	0·35	0·27
	Rural ...	7,09,429	0·62	0·49
Thar and Párkar	Urban ...	2,828	...	0·35
	Rural ...	2,00,516	0·50	0·45
Shikárpur	Urban ...	83,073	0·55	0·61
	Rural ...	7,69,913	0·41	0·44
Upper Sind Frontier	Urban ...	11,352	0·53	0·17
	Rural ...	1,12,829	0·15	0·21
Presidency ...	Urban ...	21,05,756	0·39	0·36
	Rural ...	1,43,48,658	0·36	0·33

Death-rate in towns and cantonments compared with the collectorates.

124. In the following table the ratios of town and cantonment circles are compared with the ratios of the collectorate in which they are situated, and it will be seen from it that in 26 town and cantonment circles, the rate of mortality from injuries is higher than in the collectorate in which they are situated. The highest ratio, 0·88, took place in Sukkur, a town in the Shikárpur Collectorate, and the lowest, 0·07, in the City of Ahmedabad. In the three cantonments of Devláli, Málegaon and Ahmedabad no deaths were reported from injuries during the year:—

Collectorates.	Death-rate of Collectorates in 1884.	Town Circles and Cantonment Circles.	Death-rate of Towns and Cantonments in 1884.
Khándesh	0·23	Dhulia	0·16
		Nandurbár	0·44
		Chopda	0·14
		Nasirabad	0·19
Násik	0·16	Násik	0·45
		Yeola	0·17
		Devláli Catonment... ...	...
		Málegaon do.	...
Thána	0·45	Thána	0·28
		Kalyán...	0·54
Bombay	0·39	Bombay	0·39
Kolába...	0·32	Panvel	0·29
		Alíbág...	0·16
		Mahád...	0·29
Ahmednagar	0·20	Ahmednagar	0·21
		Sangamner	0·45
		Ahmednagar Cantonment ...	0·65
Poona	0·39	Poona	0·62
		Júnnar	0·19
		Poona Cantonment ...	0·23
		Kirkee do.	0·14

Collectorates.	Death-rate of Collectorates in 1884.	Town Circles and Cantonment Circles.	Death-rate of Towns and Cantonments in 1884.
Sholápur	0·25	Sholápur	0·17
		Bársi	0·68
		Pandharpur	0·41
Sátára	0·33	Sátára	0·34
		Wái	0·17
		Karád	0·19
Ratnágiri	0·35	Vengurla	0·22
		Ratnágiri	0·08
Belgaum	0·34	Belgaum	0·82
		Gokák...	0·19
		Athni	0·80
		Belgaum Cantonment ...	0·42
Dhárwár	0·27	Dhárwár	0·40
		Hubli	0·38
		Gadag Bettigeri	0·23
		Ránebennur	0·39
Kaládgi	0·30	Kaládgi	0·42
Kánara...	0·45	Kárwár	0·29
		Kumta...	0·19
Surat	0·47	Surat	0·41
		Bulsár	0·15
Broach...	0·35	Broach	0·32
		Jambusar	0·52
Kaira	0·39	Kaira	0·16
		Nadiád	0·63
		Borsad	0·17
		Kapadvanj	0·28
Panch Mahál	0·42	Godra	0·37
		Dohad...	0·73
Ahmedabad	0·22	Ahmedabad Cantonment ...	0·07
		Gogha	0·71
		Viramgám	0·42
		Dholka...	0·17
		Ahmedabad Cantonment ...	...
Karáchi	0·41	Karáchi	0·31
Hyderabad	0·48	Hyderabad	0·27
Thar and Párkar	0·45	Umarkot	0·35
Shikárpur	0·45	Shikárpur	0·47
		Sukkur	0·88
		Lárkhána	0·53
Upper Sind Frontier ...	0·21	Jacobabad Town Circle & Cantonment	0·17

Snake-bites by months.

125. The monthly distribution of deaths from snake-bites are given in the next statement for each year from 1879 to 1884 inclusive. These deaths in 1884 were as usual most numerous during the rainy season :—

Months.	Years.						
	1879.	1880.	1881.	1882.	1883.	Mean for 5 years.	1884.
January	29	26	39	35	34	33	31
February	28	20	34	39	28	30	27
March	37	49	55	47	44	46	41
April	51	50	55	63	53	54	58
May...	96	94	95	102	95	96	79
June	128	159	162	149	155	151	145
July	146	177	191	168	179	172	180
August	133	150	165	189	226	173	179
September	141	159	161	211	181	171	139
October	154	177	128	166	133	151	117
November	63	78	80	71	62	71	55
December	38	40	44	37	25	37	26
Total ...	1,044	1,179	1,209	1,277	1,215	1,185	1,077

Snake-bites by Collectorates.

126. They are similarly shown by localities, and as usual, the highest number, 151, is from Hyderabad; Ratnágiri follows with 120 and Thána with 84. In the city of Bombay only one death was recorded. The total for the Presidency during the year is less by 138 than the previous year:—

Collectorates.	Years.						
	1879.	1880.	1881.	1882.	1883.	Mean for 5 years.	1884.
Khándesh	34	39	44	25	24	33	31
Násik	21	29	21	13	14	20	8
Thána	116	102	114	148	120	120	84
Bombay	6	10	2	5	6	6	1
Kolába	26	29	32	40	26	31	24
Ahmednagar	7	26	17	18	14	16	16
Poona	25	26	21	31	28	26	38
Sholápur	2	11	9	10	7	8	8
Sátára	49	51	44	46	49	48	59
Ratnágiri	159	174	164	149	112	152	120
Belgaum	23	31	43	34	30	32	42
Dhárwár	29	23	36	24	27	28	28
Kaládgi	18	19	32	33	35	27	22
Kánara	25	20	27	22	12	21	19
Surat	40	50	54	49	48	48	42
Broach	16	14	26	35	28	24	16
Kaira	46	79	60	61	77	65	70
Panch Maháls	25	36	28	29	36	31	34
Ahmedabad	42	39	31	64	65	48	40
Karáchi	71	87	99	87	56	80	63
Hyderabad	190	193	186	190	212	194	151
Thar and Párkar	29	42	42	78	78	54	55
Shikárpur	43	46	74	77	107	69	96
Upper Sind Frontier ...	2	3	3	9	4	4	10
Total ...	1,044	1,179	1,209	1,277	1,215	1,185	1,077

Details of Injuries.

127. In the following table the deaths from injuries are detailed under specified headings, and it will be seen that of the 2,461 deaths by drowning 399 were suicidal, 1,862 accidental, and 200 are entered as "otherwise". This heading means that when the return was submitted these deaths could neither be pronounced suicidal nor accidental. There were 1,269 deaths by drowning in wells against 1,285 in 1883. Of the 683 suicidal deaths 399 were the result of drowning, 65 of taking poison, 194 of hanging, and 25 of self inflicted wounds;—

District.	No.	Names of Registration Circles.	2. Drowning. Suicidal. Well. Male.	Female.	Total.	Tank. Male.	Female.	Total.	Otherwise. Male.	Female.	Total.	Accidental. Well. Male.	Female.	Total.	Tank. Male.	Female.	Total.	Otherwise. Male.	Female.	Total.
Western Registration District.	1	Khándesh	11	15	26	1	..	1	2	1	3	39	44	83	5	6	11	17	12	29
	2	Násik	..	3	3	..	..	..	..	..	..	11	19	30	2	3	5	12	4	16
	3	Thána	3	9	12	1	..	1	2	1	3	11	46	57	6	7	13	23	22	45
	4	Bombay	15	10	25	6	6	12	3	..	3	2	3	5	11	1	12	8	4	12
	5	Kolába	..	2	2	2	..	2	..	1	1	12	14	26	5	4	9	18	13	31
Central Registration District.	6	Ahmednagar	2	13	15	..	1	1	1	3	4	22	30	52	1	..	1	10	6	16
	7	Poona	4	15	19	1	2	3	2	4	6	30	60	90	2	5	7	20	14	50
	8	Sholápur	6	8	14	..	..	..	2	..	2	36	40	76	1	2	3	9	3	12
	9	Sátára	7	29	36	..	..	..	1	1	2	45	74	119	6	3	9	19	8	27
	10	Ratnágiri	1	3	4	..	3	3	4	4	8	10	12	22	7	7	14	20	32	52
Southern Registration District.	11	Belgaum	6	15	21	1	1	2	..	5	5	21	55	76	6	2	8	24	10	34
	12	Dhárwár	9	29	38	1	4	5	..	2	2	19	24	43	11	6	17	6	3	9
	13	Kaládgi	1	10	11	2	2	4	..	2	2	13	27	40	3	1	4	10	6	16
	14	Kánara	4	5	9	..	2	2	1	3	4	7	15	22	6	10	16	24	13	37
Eastern Gujarát Registration District.	15	Surat	14	17	31	..	..	..	8	..	8	4	30	34	7	3	10	42	20	62
	16	Broach	2	6	8	..	..	..	..	..	..	5	8	13	3	5	8	7	7	14
	17	Kaira	4	15	19	1	..	1	..	..	..	10	31	41	26	12	38	6	2	8
	18	Panch Mahála	1	2	3	..	..	..	..	..	..	..	7	7	3	1	4	5	2	7
	19	Ahmedabad	5	5	10	..	..	..	..	..	..	11	28	39	7	8	15	5	2	7
Sind Registration District.	20	Karáchi	..	..	..	..	..	..	..	..	..	1	..	1	17	8	25	25	11	36
	21	Hyderabad	..	..	..	1	..	1	..	..	..	8	6	14	35	25	60	18	7	25
	22	Thar and Párkar	..	..	..	..	..	..	..	..	..	4	..	4	6	3	9	1	..	1
	23	Shikárpur	1	1	2	..	..	..	..	..	..	2	6	8	17	4	21	57	37	94
	24	Upper Sind Frontier	..	..	..	..	..	..	..	..	..	1	3	4	1	..	1	3	3	6
		Total ...	96	212	308	17	21	38	26	27	53	318	588	906	194	126	320	395	241	636

No.	Names of Registration Circles.	2. Drowning. *Otherwise. Well. Male.	Female.	Total.	Tank. Male.	Female.	Total.	Other-wise. Male.	Female.	Total.	3. Poisoning. Suicidal. Male.	Female.	Total.	Accidental. Male.	Female.	Total.	*Otherwise. Male.	Female.	Total.
1	Khándesh	2	..	2	1	..	1	9	2	11	..	..	..	..	2	2	..	..	..
2	Násik	3	2	5	..	1	1	8	5	13	1	1	2	1	..	1	1	..	1
3	Thána	3	3	6	..	1	1	2	6	8	1	..	1	..	..	..	4	..	4
4	Bombay	3	3	6	8	1	9	10	1	11	14	8	22	13	3	16	..	1	1
5	Kolába	..	..	..	..	..	..	2	3	5	1	..	1	1	..	1	2	1	3
6	Ahmednagar	..	..	..	..	..	..	2	1	3	1	..	1	1	1	2	..	..	..
7	Poona	1	5	6	1	..	1	4	2	6	7	6	13	4	..	4	1	..	1
8	Sholápur	..	..	..	..	..	..	2	2	4	3	1	4	..	..	..	..	1	1
9	Sátára	5	2	7	..	1	1	4	7	11	2	4	6	..	1	1	..	..	..
10	Ratnágiri	4	..	4	..	..	..	3	2	5	2	..	2	..	..	..	..	..	..
11	Belgaum	..	..	..	..	..	..	2	2	4	1	..	1	2	2	4	1	..	1
12	Dhárwár	1	2	3	..	..	..	3	3	6	1	..	1	..	..	..	..	..	..
13	Kaládgi	..	8	8	..	..	..	1	1	2	..	..	..	..	1	1	..	..	..
14	Kánara	..	..	..	..	..	..	5	1	6	..	1	1	..	..	..	1	..	1
15	Surat	..	1	1	..	..	..	3	..	3	1	..	1	..	..	..	..	1	1
16	Broach	..	..	..	..	..	..	4	..	4	..	..	..	..	1	1	..	..	..
17	Kaira	1	..	1	5	..	5	..	..	..	1	3	4	3	..	3	1	1	2
18	Panch Mahála	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
19	Ahmedabad	1	..	1	..	..	..	..	..	..	1	1	2	..	..	..	..	..	..
20	Karáchi	..	..	..	..	..	..	1	3	4	1	..	1	..	..	..	..	..	..
21	Hyderabad	1	..	1	1	..	1	1	..	1	1	..	1	..	..	..	..	2	2
22	Thar and Párkar	2	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
23	Shikárpur	1	1	2	..	1	1	10	7	17	1	..	1	..	..	..	1	1	2
24	Upper Sind Frontier	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Total ...	28	27	55	16	5	21	76	48	124	40	25	65	25	11	36	12	8	20

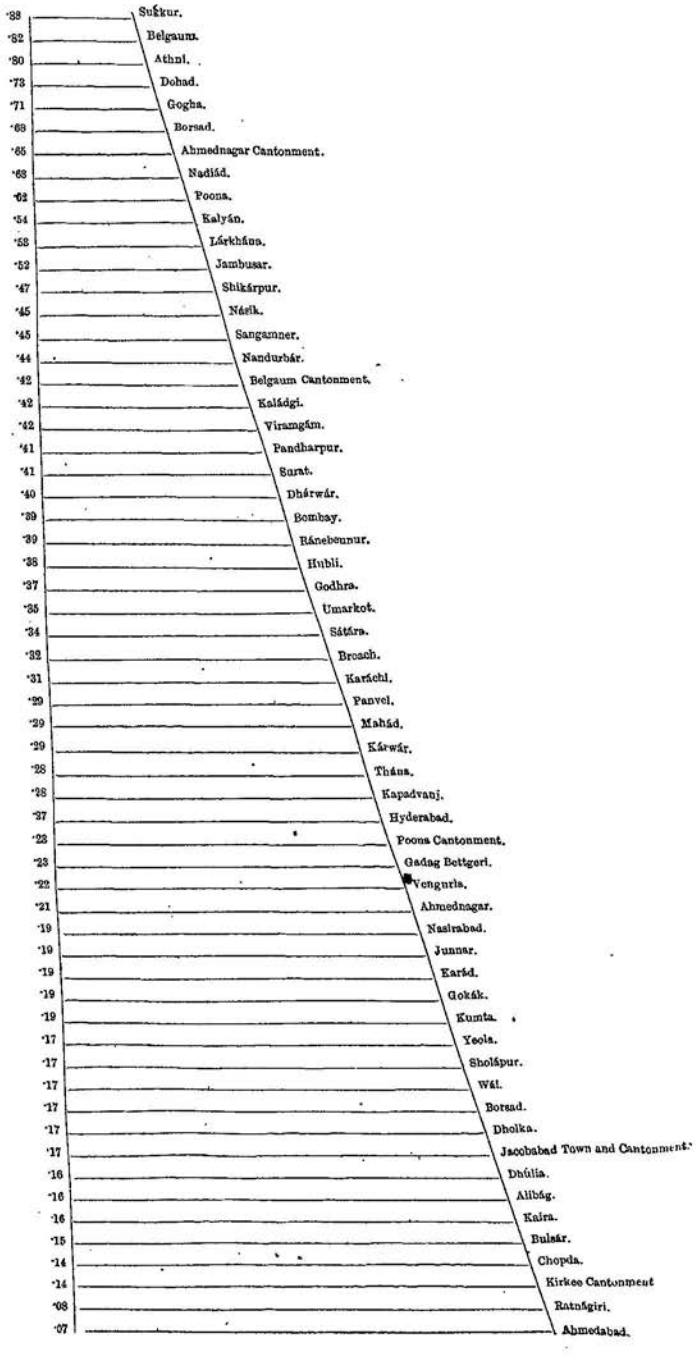
No.	Names of Registration Circles.	4. Hanging. Suicidal. Male.	Female.	Total.	Accidental. Male.	Female.	Total.	5. Wounding. Suicidal. Male.	Female.	Total.	Accidental. Male.	Female.	Total.	*Otherwise. Male.	Female.	Total.	6. Wild Beasts. Male.	Female.	Total.
1	Khándesh	2	2	4	1	1	2	..	..	..	5	3	8	5	5	10	3	1	4
2	Násik	1	..	1	..	..	..	..	1	1	5	1	6	2	1	3	..	..	..
3	Thána	16	7	23	..	1	1	1	..	1	23	4	26	21	4	25	5	2	7
4	Bombay	1	..	1	..	..	..	1	..	1	..	..	..	1	1	2	..	..	..
5	Kolába	2	1	3	..	..	..	1	..	1	5	3	8	1	..	1	..	..	..
6	Ahmednagar	1	..	1	..	..	..	..	..	..	4	..	4	1	4	5	1	3	4
7	Poona	3	..	3	1	..	1	4	1	5	21	6	27	10	3	13	5	1	6
8	Sholápur	3	..	3	..	..	..	..	..	..	..	..	..	2	1	3	3	..	3
9	Sátára	2	2	4	..	..	..	..	..	..	6	5	11	2	2	4	3	..	3
10	Ratnágiri	11	2	13	..	..	..	..	..	..	7	..	7	3	..	3	4	3	7
11	Belgaum	12	9	21	4	1	5	..	1	1	16	4	20	5	3	8	5	1	6
12	Dhárwár	19	9	28	..	1	1	2	..	2	17	5	22	6	2	8	1	2	3
13	Kaládgi	15	6	21	2	..	2	..	1	1	4	6	10	3	3	6	5	..	5
14	Kánara	8	2	10	..	..	..	..	..	..	12	1	13	2	7	9	3	..	3
15	Surat	3	1	4	..	..	..	..	..	..	6	2	8	2	..	2	11	7	18
16	Broach	..	1	1	..	..	..	..	..	..	4	..	4	5	..	5	4	4	8
17	Kaira	3	7	10	1	..	1	..	..	..	6	..	6	7	1	8	8	6	14
18	Panch Mahála	1	1	2	..	..	..	1	..	1	3	1	4	11	..	11	6	2	8
19	Ahmedabad	..	13	13	1	..	1	..	..	..	10	7	17	1	1	2	5	2	7
20	Karáchi	1	2	3	..	1	1	..	3	3	5	..	5	7	2	9	3	1	4
21	Hyderabad	5	4	9	2	1	3	..	..	..	8	1	9	3	3	6	3	1	4
22	Thar and Párkar	1	1	2	..	..	..	..	1	1	..	..	..	..	..	..	2	..	2
23	Shikárpur	5	9	14	1	..	1	3	4	7	11	5	16	8	7	15	2	..	2
24	Upper Sind Frontier	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..
	Total ...	115	79	194	13	6	19	13	12	25	177	54	231	109	50	159	82	36	118

No.	Names of Registration Circles.	7. Snake-bite. Male.	Female.	Total.	8. Other Causes. Male.	Female.	Total.	9. Total. Male.	Female.	Total.
1	Khándesh	25	6	31	32	20	52	160	120	280
2	Násik	7	1	8	21	8	29	75	50	125
3	Thána	56	28	84	33	12	45	210	153	363
4	Bombay	..	1	1	120	43	163	216	86	302
5	Kolába	15	9	24	21	17	38	88	68	156
6	Ahmednagar	11	5	16	12	9	21	70	76	146
7	Poona	21	17	38	53	11	64	201	152	353
8	Sholápur	5	3	8	10	5	15	76	72	148
9	Sátára	29	30	59	31	18	49	162	187	349
10	Ratnágiri	70	50	120	59	30	89	205	148	353
11	Belgaum	25	17	42	25	9	34	156	137	293
12	Dhárwár	17	11	28	11	8	19	124	111	235
13	Kaládgi	12	10	22	24	16	40	95	100	195
14	Kánara	10	9	19	34	6	40	117	75	192
15	Surat	22	20	42	51	17	68	174	119	293
16	Broach	5	11	16	17	15	32	56	58	114
17	Kaira	25	45	70	62	24	86	170	147	317
18	Panch Mahála	18	16	34	21	6	27	70	38	108
19	Ahmedabad	18	22	40	19	17	36	84	106	190
20	Karáchi	50	13	63	24	15	39	135	59	194
21	Hyderabad	119	32	151	48	23	71	254	105	359
22	Thar and Párkar	42	13	55	8	8	16	66	26	92
23	Shikárpur	68	28	96	62	26	88	250	137	387
24	Upper Sind Frontier	8	2	10	3	1	4	17	9	26
	Total ...	678	390	1,077	801	364	1,165	3,231	2,339	5,570

*The term "Otherwise" is used, because when the Return is submitted, the Law may not have pronounced these Cases to be "Homicidal."

128. The following diagram shows at a glance the death-rate from injuries in each town and cantonment in the Presidency arranged in sequence from highest to lowest rate :—

Injuries,—diagram.



OTHER CAUSES.

Deaths from other causes by sexes.

129. The recorded deaths from causes other than those specified numbered 61,625, 31,821 of which occurred among males and 29,804 among females. The total for 1883 was 60,829, so for this year there is an increase of 796.

By Districts and Collectorates.

In the following table these deaths are shown for each district and collectorate and the mean for the last 10 years, the number and ratios per 1,000 of population, and the numbers and ratios for 1883 and 1884 are also given :—

Districts.	Number.	Collectorates.	Population according to Census of 1881.	Deaths from other Causes in. Means for 10 years from 1874 to 1883.	Ratio per 1,000 of Population.	1883.	Ratio per 1,000 of Population on Census of 1881.	1884.	Ratio per 1,000 of Population on Census of 1881.
Western Registration District.	1	Khándesh	12,37,231	912	0·84	1,447	1·17	792	0·64
	2	Násik	781,296	2,092	2·30	2,564	3·28	1,972	2·52
	3	Thána	807,567	1,673	2·17	1,936	2·40	2,079	2·57
	4	Bombay City	773,196	11,033	16·16	12,931	16·72	12,832	16·60
	5	Kolába	432,830	1,367	3·01	2,026	4·20	1,542	3·19
Central Registration District.	6	Ahmednagar	751,228	2,746	3·58	3,011	4·01	2,699	3·59
	7	Poona	900,621	2,653	2·93	2,863	3·18	3,110	3·45
	8	Sholápur	582,487	4,014	6·92	1,946	3·34	1,957	3·36
	9	Sátára	10,62,850	2,819	3·78	2,698	2·54	3,221	3·03
	10	Ratnágiri	997,090	4,956	4·89	6,281	6·30	5,060	5·08
Southern Registration District.	11	Belgaum	864,014	9,009	9·83	4,534	5·25	5,686	6·58
	12	Dhárwár	882,907	6,334	6·62	4,283	4·85	5,801	6·00
	13	Kaládgi	638,493	5,561	7·29	2,211	3·46	2,753	4·31
	14	Kánara	421,840	3,738	9·22	3,511	8·32	3,465	8·21
Eastern Gujarát Registration District.	15	Surat	614,198	1,825	3·00	1,615	2·63	1,321	2·16
	16	Broach	326,930	610	1·77	586	1·79	751	2·30
	17	Kaira	804,800	1,057	1·24	1,239	1·54	1,241	1·54
	18	Panch Mahále	255,479	314	1·23	65	0·25	97	0·38
	19	Ahmedabad	556,924	3,453	4·12	2,693	3·04	3,179	3·71
Sind Registration District.	20	Karáchi	473,688	1,053	2·39	1,253	2·62	1,398	2·92
	21	Hyderabad	754,024	593	0·81	683	0·91	637	0·83
	22	Thar and Párkar	209,344	122	0·65	144	0·71	144	0·71
	23	Shikárpur	852,986	331	0·41	360	0·42	346	0·41
	24	Upper Sind Frontier	124,181	54	0·54	39	0·31	52	0·42

ABSTRACT.

Western Registration District	4,081,320	17,077	4·56	20,904	5·12	19,217	4·71
Central " "	4,293,776	17,183	3·98	16,799	3·91	16,047	3·74
Southern " "	2,807,254	24,642	8·10	14,539	5·18	17,205	6·13
Eastern Gujarát " "	2,857,731	7,259	2·57	6,108	2·14	6,589	2·31
Sind " "	2,413,823	2,153	0·95	2,479	1·03	2,567	1·06
Presidency ..	16,454,414	68,319	4·19	60,829	3·70	61,625	3·74

Deaths since 1873.

130. The number of deaths registered from other causes in each year since 1873 is as follows :—

Years.	Number of Deaths from other Causes.	Years.	Number of Deaths from other Causes.
1873	60,343	1879...	59,467
1874	57,840	1880...	49,736
1875	65,679	1881...	55,522
1876	63,882	1882...	56,164
1877	1,38,426	1883...	60,829
1878	75,642	1884...	61,625

SECTION VII.

GENERAL HISTORY OF VACCINATION.

For full details see Appendix I.

Strength of the Department.

131. The strength of the Department during 1884-85 was :—

5 Deputy Sanitary Commissioners.
3 Superintendents of Vaccination.
31 Inspectors of Sanitation and Vaccination.
5 Assistant Superintendents of Vaccination.
29 Clerks and Kárkúns.
477 Vaccinators.
502 Peons.

Operations.

132. The following table contrasts the work amongst the civil and military population during the year under report with that for 1883-84 :—

Establishment.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1884-85.	1883-84.	Increase.	Decrease.	1884-85.	1883-84.	Increase.	Decrease.	1884-85.	1883-84.	Increase.	Decrease.
In Civil Life.												
Itinerant	774,311	792,784	..	18,473 / 2·33	50,999	50,494	9,505 / 18·82	..	834,310	843,278	..	8,968 / 1·06
Dispensary	24,014	29,986	..	5,972 / 19·92	1,780	2,525	..	745 / 29·50	25,794	32,511	..	6,717 / 20·66
Total ..	798,325	822,770	..	24,445 / 2·97	51,779	53,019	9,905 / 17·93	745 / 1·41	860,104	875,789	..	15,685 / 1·79
In Army Life.												
Native Army ..	3,554	3,698	..	144 / 3·89	1,435	2,846	..	1,411 / 49·58	4,989	6,544	..	1,555 / 23·76
British Army ..	328	497	..	169 / 34·00	147	1,009	..	862 / 85·43	475	1,506	..	1,031 / 68·46
Total ..	3,882	4,195	..	313 / 7·46	1,582	3,855	..	2,273 / 58·96	5,464	8,050	..	2,586 / 32·12
Total for the whole Presidency.	802,207	826,965	..	24,758 / 2·99	53,361	56,874	9,505 / 16·71	3,018 / 5·31	865,568	883,839	..	18,271 / 2·07

Eight hundred and two thousand two hundred and seven persons were primarily vaccinated and 63,361 were re-vaccinated against 826,965 and 56,874 in 1883-84, showing a net decrease of 24,758 or 2·99 per cent. under primary vaccinations and a net increase of 6,487 or 11·40 per cent. under re-vaccinations. There was a considerable decrease (68·46) per cent. under total operations amongst British Troops, the figures being 475 against 1,506 in the preceding year. The rate of decrease in re-vaccinations was 5·31 per cent., but it was very high amongst European Troops, being 85·43 per cent. On the whole there has been a decrease of 18,271 or, in other words, for every hundred persons operated on in 1883-84 the numbers for this year have been 97·93.

133. The following table shows the number of persons primarily vaccinated as also the increase or decrease for the last ten years :—

Primarily vaccinated.	Years ending 31st March.										
	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885
Persons	671,817	690,639	732,184	670,055	561,969	583,501	642,505	729,323	792,206	826,965	802,207
Increase	..	18,822	41,545	..	..	24,532	56,004	86,818	62,883	34,759	..
Decrease	..	..	..	62,129	108,086	..	..	..	..	..	24,758

134. The following table shows for the last two years the number of infants successfully vaccinated in the Presidency exclusive of Native States. The birth and death statistics are taken for the calendar year in calculating the number available for vaccination because infants are generally not vaccinated until three months after birth :—

Years.	Children vaccinated successfully.		Children available for Vaccination.	Births returned as having been registered.	Deaths registered among Children under one year.
	Those under one year.	Those between 1 and 6 years.			
1883-84	307,358	178,627	412,093	501,801	89,708
1884-85	328,646	155,393	437,580	534,723	97,143

This year the successful vaccinations fell short of the registered births *minus* deaths amongst those under one year old, and yet the number vaccinated is greater than that for the previous year.

135. Out of 802,207 persons primarily vaccinated 764,445 cases were successful or 95·29 per cent., being 0·40 per cent. below 1883-84. The number of unsuccessful cases was in excess of that in the preceding year, being 18,948 against 17,363. Two thousand eight hundred and sixty-eight persons were operated on a second time on account of the failure of the first operation and in 21,682 cases the result was unknown.

136. During the year 63,361 persons were re-vaccinated against 56,874 for 1883-84. In 64 instances the re-vaccinations were repeated, in 8,104 instances the result could not be ascertained, and in 14,066 the operations failed. The number of successful cases was 41,255 or 65·11 per cent. against 66·21 in the preceding year.

137. The total number of persons operated on was 865,568, and of these 805,700 or 93·08 per cent. were successful. In 1883-84 the percentage was 93·79. 2,932 persons were operated on more than once; the "unsuccessful" numbered 33,014 and the "unknown" cases were 29,786.

The details of the total number of persons operated on for the last two years by districts and circles of vaccination, together with the percentages of increase and decrease, are as follows :—

Districts and Circles.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1884-85.	1883-84.	Increase.	Decrease.	1884-85.	1883-84.	Increase.	Decrease.	1884-85.	1883-84.	Increase.	Decrease.
Western Registration District.	96,072	92,295	3,777 / 4·09	..	1,744	1,571	173 / 11·01	..	97,816	93,866	3,950 / 4·21	..
Presidency Circle.. ..	16,168	15,823	345 / 2·18	..	2,059	2,716	..	657 / 24·19	18,227	18,539	..	312 / 1·68
Central Registration District.	155,201	160,432	..	5,231 / 3·26	5,469	5,270	199 / 3·08	..	160,670	165,702	..	5,032 / 3·04
Southern Registration District.	133,853	141,822	..	7,969 / 5·62	5,034	5,934	..	900 / 15·17	138,887	147,756	..	8,869 / 6·00
Eastern Gujarát Registration District.	122,795	130,134	..	6,339 / 4·87	2,310	7,371	..	5,061 / 68·66	126,105	137,505	..	11,400 / 8·29
Western Gujarát Circle ..	101,244	105,185	..	3,941 / 3·76	25,648	7,690	17,958 / 233·52	..	126,892	112,875	14,017 / 12·42	..
Sind Registration District.	83,736	86,347	..	2,611 / 3·02	19,035	21,731	..	2,696 / 12·41	102,771	108,078	..	5,307 / 4·92
Baroda	66,811	70,728	..	3,917 / 5·54	283	466	..	183 / 3,927	67,094	71,194	..	4,100 / 5·76
Cutch	20,486	18,803	1,683 / 8·95	..	188	264	..	76 / 28·79	20,674	19,067	1,607 / 8·43	..
Aden, Muscat, Khelat and Bushire.	959	1,201	..	242 / 20·15	9	6	3 / 50·00	..	968	1,207	..	239 / 19·80
British Army	328	497	..	169 / 34.00	147	1,009	..	862 / 85·43	475	1,506	..	1,031 / 68·46
Native do.	3,554	3,698	..	144 / 3·89	1,435	2,846	..	1,411 / 49·58	4,989	6,544	..	1,555 / 23·76
Total ..	802,207	826,965	5,805 / 0·70	30,563 / 3·69	63,361	56,874	18,333 / 32·23	11,846 / 20·83	865,568	883,839	19,574 / 2·21	37,845 / 4·28

138. In primary vaccinations a decrease of 5,805 or 0·70 per cent. took place in three out of twelve districts and circles, namely Cutch, Western Registration District and Presidency Circle. The decrease in other districts is 30,563 or 3·69 per cent.—nearly treble the rate of increase. These vaccination units stand in the following sequence: the British Army, Aden, Muscat, Khelat and Bushire, Southern, Baroda, Eastern Gujarát, Native Army, Western Gujarát, Central and Sind Registration District, where the rate is only 3·02 per cent.

139. In re-vaccinations an increase of 18,333 or 32·23 per cent. is distributed over the Western Gujarát, Aden, Muscat, Khelat and Bushire, Western and Central Registration District, where the rate is 3·08 per cent. The decrease in other districts amounts to 11,846 or 20·83 per cent. These circles stand in the following sequence: the British Army, Eastern Gujarát, Native Army, Baroda, Cutch, Presidency Circle, Southern and Sind Registration District; in the last named the rate was 12·41 per cent.

140. As regards operations a decrease of 37,845 or 4·28 per cent. is observed in the British and Native Army, Aden, Muscat, Khelat and Bushire, Eastern Gujarát, Southern, Baroda, Sind, Central and the Presidency Circle, which has the lowest rate of 1·68 per cent., whilst an increase of 19,574 or 2·21 per cent. is distributed over the Western Gujarát, Cutch and the Western Registration District, where it is only 4·21 per cent. The net decrease is 18,271 or 2·07 per cent.

141. The following table shows by districts and circles the percentages of success in primary vaccinations and re-vaccinations contrasted with those for the previous year:—

No.	Districts and Circles.	Percentages of Success in Primary Vaccinations.		Percentages of Success in Re-vaccinations.	
		1883-84.	1884-85.	1883-84.	1884-85.
1	Cutch Circle	99·12	99·17	87·50	90·43
2	Western Registration District	97·47	97·93	67·60	69·67
3	Eastern Gujarát Registration District ...	96·92	96·77	55·34	59·22
4	Presidency Circle	94·24	96·54	79·05	87·03
5	Central Registration District	97·15	96·50	67·25	64·82
6	Baroda Circle	96·35	95·46	73·39	74·20
7	Southern Registration District	95·04	94·45	65·84	68·18
8	Sind Registration District	94·92	94·42	68·36	64·70
9	British Army	93·76	92·99	61·35	77·55
10	Western Gujarát Circle	91·67	90·32	68·91	63·30
11	Native Army	84·59	87·82	55·06	59·51
12	Aden, Muskat, Khelat and Bushire... ...	77·02	76·95	66·67	44·44
	Average for the whole Presidency ...	95·69	95·29	66·21	65·11

In the "successful" primary vaccinations the percentages are lower than last year in eight out of twelve districts and circles. In Cutch, Western Registration District, Presidency Circle, and Native Army they are higher owing to there being a fewer "unsuccessful" and "unknown" cases than last year. But in Cutch they are attributable to there being more "successful" cases than in 1883-84.

142. The ratio to the whole population of protection by successful operation is higher than last year in Western Registration District, Presidency Circle and Cutch. It is lowest in Aden, Muscat, Khelat and Bushire and Presidency Circle. In British and Native Territory it is respectively 30·14 and 29·30 against 30·57 and 31·49 per mille of population in the previous year. On the whole 29·84 persons of all ages per every 1,000 of population against 30·89 last year, 29·74 in 1882-83, 27·54 in 1881-82 and 24·00 in 1880-81, were primarily vaccinated successfully.

Agency.

143. In primary vaccinations the percentages are higher than in the preceding year in Government, Municipal and Cantonment establishments and in the Native Army. The highest percentage is 99·12 in Cantonments and the lowest is 87·82 in the Native

Army. The next highest is 96·63 in Government and the next lowest is 90·06 in dispensaries. In re-vaccinations the lowest percentage is 55·99 in Cantonments and the highest is 89·68 under Government.

Sex.

144. There were 415,012 males and 387,195 females primarily vaccinated. The re-vaccinated were respectively 39,199 and 24,162, and the totals of persons operated on were 454,211 males and 411,357 females. In primary vaccinations the sex percentages were respectively 51·73 and 48·27 against 51·76 and 48·24 last year; in re-vaccinations they are 61·87 and 38·13 against 64·50 and 35·50; and in total operations they are 52·48 and 47·52 against 52·58 and 47·42.

Race.

145. Of the total number primarily vaccinated 3,819 were Christians, 617,277 Hindus, 122,763 Musalmáns, 2,124 Pársis and 56,224 persons of Other Castes, and in all classes except Pársis the numbers are lower than last year, the respective percentages being 0·48, 76·95, 15·30, 0·26 and 7·01; the percentages for Hindus and Pársis are however higher by only 0·78 and 0·03 respectively.

Age.

146. The age details are compiled for three periods, *viz.*, under one year, between one and six, and above six years. The numbers under each period primarily vaccinated were respectively 525,905, 257,938 and 18,364 against 504,282, 293,582, and 24,101 during the preceding year. At the rate of 31 per mille of population, and on the total population of 25,615,528 there were successfully vaccinated 63·41 per cent. against 61·00 in 1883-84, 59·01 in 1882-83, 58·35 in 1881-82, 49·27 in 1880-81 and 39·78 in 1879-80. Thus each year is characterised by progress in the protection afforded to infants.

Animal vaccination.

147. Animal vaccination was carried on in Bombay, Poona City and Cantonment, Broach and Kaira Collectorates and Jámnagar. The operation of inoculating heifers was generally successful. In Western Gujarát animal vaccination was, before the cold weather tour, carried on in Jámnagar by the Assistant Superintendent of Vaccination, who successfully inoculated nine heifers and distributed the lymph among the vaccinators. Except in Bombay where animal lymph only is used and in Poona, Broach, Ankleshvar, Nadiád, Borsad, A'nand and Jámnagar, where both animal and human lymph were in use, vaccination in all other places was carried on from arm to arm and with human lymph. Vaccination with animal lymph was also carried on in Bandora.

Expenditure.

148. The total expenditure on account of vaccination is shown in the following table :—

Establishment.	Total Expenditure.						Compared with the preceding year.		
	1883-84.			1884-85.			+ Increase. − Decrease.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Provincial	1,11,770	9	1	1,16,994	2	7	+5,223	9	6
Municipal	25,710	1	11	24,611	7	3	—1,098	10	8
Cantonment	804	4	6	775	11	6	—28	9	0
Local Fund	78,842	1	6	82,473	12	4	+3,631	10	10
Native State	52,611	8	0	54,848	13	1	+2,237	5	1
Total ...	2,69,738	9	0	2,79,703	14	9	+11,092	9	5
							--1,127	3	8
							+9,965	5	9

149. The total cost for the whole Presidency, including all charges was Rs. 2,79,703-14-9 and the average cost for each successful case was annas 5-9, or 4 pies more than last year.

150. Excluding the pay of the supervising officers the average cost of each successful case was annas 4-6 or 2 pies more than for the previous year.

151. Taking together the work of all the Deputy Sanitary Commissioners, Superintendents of Vaccination, Assistant Superintendents of Vaccination and Inspectors of Sanitation and Vaccination, there were 4,546 encampments, 87,076¼ miles travelled in 8,063 days and 332,759 children inspected in 12,709 villages. Out of every 100 persons operated on 38·44 were this year inspected against 40·76 in the preceding year.

152. In Bombay the Compulsory Vaccination Act has been in force for seven years and in Karáchi for five years, and in both places there has been, since the introduction of the Act, a considerable increase in the number of infants protected.

SECTION VIII.

SANITARY WORKS—MILITARY.

153. This section consists of extracts taken from the reports of the Executive Engineers in charge of Military stations.

154. The actual outlay on sanitary works (Military) during 1884 amounted to Rs. 98,885. Of this sum Rs. 34,948 were expended at Ahmedabad, of which Rs. 34,591 were for constructing Hospital for British Troops. At Deesa Rs. 4,751 were spent, of which Rs. 2,866 were for constructing Latrines for Native Infantry and Rs. 1,035 for erecting a contagious disease ward to the Native Cavalry Hospital. At Nasirabad Rs. 22,627 were expended, of which Rs. 14,382 were for constructing a new circular storage tank and filter-bed in connection with the water-supply scheme. At Indore Rs. 2,062 were expended on a new pucca well for the Native Infantry lines. At Hyderabad Rs. 6,477 were spent, of which Rs. 5,815 were for improving the drainage of Military buildings. At Aden Rs. 13,355 were expended, of which Rs. 6,730 were for re-roofing the upper male ward of the European Infantry Hospital, Rs. 3,242 for laying pipes from the iron water tanks to the Native Infantry lines, and Rs. 3,383 for laying pipes to convey condensed water from Seera to tank in Little Isthmus.

155. The following table shows the total amount spent on sanitary works (Military) at each station during the year 1884 :—

Stations.	Actual Outlay.	Stations.	Actual Outlay.
	Rs.		Rs.
Bombay	475	Sirúr	...
Kolába...	370	Purandhar	184
Thána	...	Sholápur	...
Devláli...	408	Poona	61
Surat	...	Kirkee	294
Baroda	932	Khandála	...
Ahmedabad	34,948	Sátára	...
Rájkot	236	Kolhápur	...
Bhúj	...	Belgaum	37
Deesa	4,751	Dhárwár	...
Mount Abu	29	Karáchi...	625
Nasirabad	22,627	Hyderabad (Sind)	6,477
Neemuch	1,230	Jacobabad	...
Mehidpur	...	Aden	13,355
Agar...	233	Sibi	2,400
Indore	2,062	Sharigh...	...
Mhow	7,151	Gundakinduff	...
Asirgarh	...	Dákki	...
Málegaon	...	Bolan	...
Ahmednagar	...		

BOMBAY DISTRICT.

Stations.—Bombay, Kolába, Thána, and Devláli.

BOMBAY.

156. The Executive Engineer, Bombay Defences, reports that the following works were undertaken during 1884 :—

Constructing a dispensekhana in bungalow No. 20 in the Marine Lines in the occupation of the Commandant, Marine Battalion. The building is constructed with stone and lime founda-

tion, brick walling on four sides, concrete floor, teak plank doors and windows, cut teak posts, plates and rafters, and covered Mangalore tiles.

	Rs.
Estimated cost	200
Actual cost	200

Providing a plank gutter to bungalow No. 3 in the Marine Lines.—The gutter consists of teak plank 1" thick dammered on new cloth, and it has a zinc pipe to carry away the water.

	Rs.
Estimated cost	25
Actual cost	23

Providing a cudjan passage in the Brigadier-General's bungalow No. 3, Marine Lines.—The passage is constructed of round teak posts, plates, and rafters, covered with new cudjans and a teak plank gutter 1", dammered on new cloth, is provided to carry away the rain water.

	Rs.
Estimated cost	98
Actual outlay	96

Providing a gutter along the eaves of the officers' bungalow No. 4, Marine Lines.—The gutter consists of teak plank 1" thick, dammered on new cloth, and double bamboo matting has been provided above the opening to prevent rain beating in the Mándoa.

	Rs.
Estimated cost	29
Actual outlay	27

Constructing new officer's quarters in the Marine Lines.

	Rs.
Estimated cost	1,65,000
Actual outlay up to 31st December 1884 ...	129

KOLA'BA.

157. Lieutenant-Colonel Merriman, R.E., Executive Engineer, Bombay Defences, reports that the following sanitary works were undertaken during the year 1884:—

Making a new door-way on the north side of the wall of the Canteen of the 2nd Battalian, E. Y. Regiment, at Kolába, and providing and fixing a plain plank door with frames.

	Rs.
Estimated cost	50
Actual cost	48

Constructing two seats in the closet attached to the children's school to convert it into a latrine of two seats.—Two seats consisting of brick and lime masonry, dwarf walls, 2" teak plank seats, teak plank doors, &c.

	Rs.
Estimated cost	60
Actual cost	59

Fixing new glazed sashes to Sergeant's rooms in Infantry Barracks Nos. 2, 3, 5, 7, and Staff Sergeants' Quarters, Infantry Lines, Colába.—Glazed sashes to each of the Sergeant's rooms Nos. 2, 3, 5, and 7 and two windows in each of the Staff Sergeant's quarters.

	Rs.
Estimated cost	71
Actual cost	69

Providing wooden run for vaulting horses, shields, racks, stands, &c., for the gymnasium at Colába, in progress.

Estimated cost ... ... Rs. 262.

Constructing 1" teak wood partition in the orderly room, Royal Artillery at Colába.—A teak partition, 20′ × 7′ × 18″ above the level of the floor line in the orderly room, Royal Artillery, consists of teak framing and 1" teak planking with a door 2½′ wide.

	Rs.
Estimated cost	85
Actual cost	84

Providing and fixing iron bars 1" across the heads of doors and windows No. 3 block and also those of Sergeants' rooms in Nos. 1, 2, 4, 5 and 6 blocks, Royal Artillery.—Fixed 1" diameter iron bars across the heads of doors and windows.

	Rs
Estimated cost	75
Actual cost	72

Filling in the well No. 32 in the compound of No. 37 bungalow, Royal Artillery.—Filled in with rubbish and earth obtainable at Colába.

	Rs.
Estimated cost	40
Actual cost	38

Additions and alterations to bungalow No. 15 used as billiard room attached to the Mess bungalow 15th E. Y. Regiment, Colába.—Pulling down portion of walls in main room and in verandah. Removing venetian shutters over dwarf walls of south and north verandahs. Constructing 5 partition walls in verandah and brick walls in places of venetian shutters proposed to be removed. Providing 3 panelled doors and 10 venetian windows in new partition. The work is in progress.

Estimated cost ... ... Rs. 659.

THA'NA.

158. Mr. K. G. Desái, L.C.E., Acting Executive Engineer, Thána, states that no sanitary work was undertaken during the year 1884.

DEVLA'LI.

159. Major Osborn, R.E., Executive Engineer, Násik Division, states that the following works were carried out during the year 1884 :—

Erecting additional gallows for hanging in slaughter-shed at camp Devláli. The hanging accommodation for meat in the Devláli slaughter-shed having been found to be insufficient, the additional gallows have been provided.

	Rs.
Estimated cost	237 0 0
Actual cost	213 12 8

Flooring the officers' ward at Devláli Hospital with concrete faced with Portland cement.—The Senior Medical Officer of the Station Hospital having represented that the cowdung flooring of the sick officers' ward was most objectionable, and if paved with stone would be so porous as to be unfit for the purpose, concrete flooring with a surface coating of Portland cement ¾" in thickness has been provided.

	Rs. a. p.
Estimated cost...	96 0 0
Actual outlay	95 0 3

Constructing a temporary shed for the treatment of bad cases of diarrhœa near the Bázár Hospital.—The shed is 12′×36′ inside dimensions with thatched roof supported on teak posts. The walls are of wattle and daub whitewashed and the floor of moorum.

	Rs. a. p.
Estimated cost	126 0 0
Actual cost	98 12 3

NORTHERN DIVISION OF THE ARMY.

160. *Stations.*—SURAT, BARODA, AHMEDABAD, RÁJKOT, BHUJ, DEESA, AND MOUNT ABU.

SURAT.

161. Mr. G. Dunn, C.E., Executive Engineer, Surat, states that no work was undertaken during the year 1884.

BARODA.

162. Major Cruickshank, R.E., Executive Engineer, Ahmedabad District, reports that the following works were undertaken during the year 1884 :—

Converting a cook-house No. 60 into a latrine for a division of Artillery for 50 men at Baroda.—The cook-house has been converted into latrine with sheet iron fixed to form

screens, burnt bricks and lime; masonry pillars have been built to hold the teak-wood seats, the chimney has been removed and roof altered to suit the nature of the work.

	Rs.
Estimated cost	262
Actual cost	263

A screen wall round latrine No. 11 at Baroda.

	Rs.
Estimated cost	89
Actual cost	89

Additions to servants' quarters of the Hospital of British Troops at Baroda.—There being insufficient accommodation for the Hospital servants, 4 rooms each 10'6" × 8'6", on the south side of the present servants' quarters, have been added; the construction is of burnt brick and mud masonry, plinth of burnt brick and lime and the roof is single tiled.

	Rs.
Estimated cost	397
Actual cost	397

Additions and alterations to Government Bakery.—In consequence of the office room being considered very hot, a window on the north side has been put up to increase the ventilation already provided, also iron pipes laid down to carry off refuse water from the kneading room, and a masonry dust-bin has been constructed to store the rubbish from the bakery.

	Rs.
Estimated cost	118
Actual cost	112

Providing a cover to well No. 148 at Baroda.—A teak wood cover has been provided to the well to protect the water from getting dirty.

	Rs.
Estimated cost	72
Actual cost	71

AHMEDABAD.

163. Major Cruickshank, R.E., Executive Engineer, Ahmedabad Division, reports that the following works were executed during the year 1884 :—

Hospital for British Troops in progress.

	Rs.
Estimated cost	1,91,197
Actual outlay during 1884	34,591
Total expenditure	1,24,263

Improving the drainage in Camp, Ahmedabad, between the Post Office and Native Infantry Hospital.—In order to carry off the rain-water which used to accumulate between the Post Office and St. George's church, a channel was excavated from the Post Office running along the side of the cantonment road to the small barrel drain near the N. I. Hospital, and the culvert being found too small to carry the water thrown into it a slab drain of 2 openings each, 18" wide, has been constructed in its stead of burnt brick and lime masonry.

	Rs.
Estimated cost	296
Actual cost	292

Improving well No. 50 used by the Native Infantry Hospital, Camp Ahmedabad.—The well has been deepened 10 feet to obtain a supply of water during the dry season.

	Rs.
Estimated cost	65
Actual cost	65

RA'JKOT.

164. The Superintendent, Public Works, Rájkot, reports that the following work was undertaken during the year 1884 :—

Roof ventilators for Cavalry Hospital.

	Rs.
Estimated cost	236
Actual cost	236

BHÚJ.

165. The Superintendent, Public Works, Bhúj, states that no work was executed during the year under report.

DEESA.

166. The Assistant Engineer, in charge Military Works and Roads Division, states that the following sanitary works were executed during the year 1884 :—

Asphalting floors of 6 urinals, European Infantry Lines.—The old earthen floor excavated to a depth of 6", and 6" of concrete spread and consolidated in its place. A layer of asphalte ¾" thick then spread over the concrete. The floor is sloped so as to cause any urine that may fall on the asphalte to flow into the pan surrounding the receptacle.

	Rs.	a.	p.
Estimated cost	160	0	0
Actual cost	161	4	0

Cover to well in Royal Artillery Lines.—A cover of teak wood with trap-door has been provided.

	Rs.	a.	p.
Estimated cost...	84	0	0
Actual cost	79	13	0

Latrine for Native Infantry.—These latrines have been constructed, one containing 40 seats and two each containing 30 seats. Screen walls consisting of wooden posts dammered and inserted into the ground without any masonry, with bamboo screen work nailed to the posts. Pans of iron, with stones for standing on, placed in position without mortar.

	Rs.	a.	p.
Estimated cost	2,768	0	0
Actual cost	2,866	6	8

Urinal in Bázár, Deesa.—Experimental urinal of 1 seat similar to standard plan for model district latrine, the only difference consisting in the shape of the pans.

	Rs.	a.	p.
Estimated cost...	24	0	0
Actual cost	28	9	8

Constructed a latrine with 10 seats in Bázár, Deesa.

	Rs.	a.	p.
Estimated cost	422	0	0
Actual cost	306	11	6

Latrine for Native Followers, Station Hospital, Deesa.—Erected a Crawford's Privy, as supplied by Messrs. Richardson and Cruddass, corrugated iron screen walls and roof on non-supports ; floor asphalte.

	Rs.	a.	p.
Actual outlay...	273	12	1

Contagious Disease Ward, Native Cavalry Hospital.—Constructed a hut ward 25′×24′ with 8′ verandah on two sides.

	Rs.	a.	p.
Estimated cost	1,000	0	0
Actual cost	1,034	14	3

MOUNT ABU.

167. The Assistant Engineer in the charge Military Works and Roads Division states that the following works were undertaken during the year 1884 :—

Addition of bamboo walls and asphalting in front of the seats of the new latrine at Abu Lawrence School.

	Rs.
Estimated cost	24
Actual cost	27

Building a small temporary latrine at Abu Road for the use of the troops leaving Abu to rejoin their corps.

	Rs.
Estimated cost	4
Actual cost	2

MHOW DIVISION OF THE ARMY.

Stations.—NASIRABAD, NEEMUCH, MEHIDPUR, AGAR, INDORE, MHOW, AND ASIRGARH.

NASIRABAD.

168. The Executing Engineer, Nasirabad, states that the following works were undertaken during the year 1884 :—

Nasirabad water-supply from the Danta Reservoir. This scheme has been in hand since 1875.

Estimated cost	Rs. 25,879
Actual cost during 1884	„ 1,441
Total cost	„ 2,60,708

A new circular storage tank and filter-beds constructed in connection with the water supply scheme.

Estimated cost	Rs. 14,383
Actual cost	„ 14,382

Improving ventilation in Royal Artillery Barrack No. 2.

Estimated cost	Rs. 1,074
Actual cost...	„ 1,074

Special roof and ceiling repairs to No. 2 Royal Artillery Barrack.

Estimated cost	Rs. 2,636
Actual cost...	„ 2,637

Additions and alterations to No. 52 Hospital for infectious diseases in European Infantry Lines.

Estimated cost	Rs. 967
Actual cost	„ 967

Scraping and white-washing stables Nos. 12, 13, and 14 in Royal Artillery Lines. This work was undertaken to check the spread of glanders disease among the Artillery horses.

Estimated cost	Rs. 491
Actual outlay	„ 467

Re-flooring Quarter Company Barrack No. 22 on account of cholera.

Estimated cost	Rs. 1,178
Actual outlay	„ 1,078

Improving roof ventilation of Sergeants' Mess cook-house in Royal Artillery Lines.

Estimated cost	Rs. 32
Actual outlay...	„ 26

Improving arrangements for the removal of the waste water from wash-houses.

Estimated cost	Rs. 176
Actual cost	„ 177

Building a urinal at Tárágarh.

Estimated cost	Rs. 109
Actual	„ 109

Building a separate latrine for women and children at Tárágarh.

Estimated cost	Rs. 166
Actual cost	„ 166

Improving ventilation in Sergeants' Quarter in European Infantry Barrack No. 28.

Estimated cost	Rs. 56
Actual outlay	„ 56

Improving ventilation in Garrison cells.

Estimated cost	Rs. 48
Actual outlay	„ 47

NEEMUCH.

169. The Executive Engineer, Mhow Division, reports that the following works were executed at Neemuch during 1884:—

A large well, 16 feet diameter, was opened out on the parade ground for the Royal Artillery horses.

Actual cost ... ... Rs. 350

A new well was dug and built up near the cavalry parade ground and a closed well near the Cavalry Lines was also opened out and got into use for the watering of the horses of the 3rd Queen's Own Light Cavalry.

Actual cost ... ... Rs. 735

Cleaning out all the wells in bázár and cantonment.

Actual cost ... ... Rs. 145.

MEHIDPUR.

170. No Sanitary works were executed during 1884.

AGAR.

171. The Executive Engineer, Indore Division, states that the following works were executed at Agar during 1884:—

Repairing Native Cavalry buildings.

Estimated cost	Rs. 129
Actual cost	„ 129

Repairing Native Infantry buildings.

Estimated cost	Rs. 104
Actual cost	„ 104

INDORE.

172. The Executive Engineer, Indore, states that the following work was executed during 1884:—

Constructing a new pucca well for the Native Infantry Lines.

Actual cost ... ... Rs. 2,062

MHOW.

173. The Executive Engineer, Mhow Division, reports that the following works were undertaken during 1884:—

Iron water tanks have been supplied to all Soldiers' kitchens for all arms.

Actual outlay ... ... Rs. 1,327

A tank filter with pump has been put up for the drinking water of the British Cavalry.

Actual cost... ... ... Rs. 1,002

A saucer drain has been placed round Cavalry Barrack No. 3 and perforated zinc slides have been fitted to verandah openings of the barrack.

Actual cost ... ...Rs. 1,288

Down pipes have been given to barrack No. 5 cavalry.

Actual cost ... ... Rs. 791

The brick waste-water drains have been taken up at the Cavalry and Heavy Battery Lines, and the drains re-laid with Basalt, a harder and non-absorbing material.

Actual cost ... ... Rs. 1,318

A belt of bamboos and trees have been planted before British Infantry Barracks Nos. 4 and 5 and arboriculture extended (excluding the above) by the planting out of 400 additional trees.

Actual cost ... ... Rs. 1,001

All wells were cleaned out in May and cholera camp well also.

Actual cost ... ...Rs. 286

Ridge ventilation has been given to latrines of cavalry barracks Nos. 1 and 2.

Actual cost ... ... Rs. 138

ASIRGARH.

174. The Executive Engineer, Hoshangabad Division, reports that no sanitary works were executed at Asirgarh during the year 1884.

POONA DIVISION OF THE ARMY.

Stations.—MÁLEGAON, AHMEDNAGAR, SIRUR, PURANDHAR, SHOLÁPUR, POONA, KIRKEE, KHANDÁLA, AND SÁTÁRA.

MA'LEGAON.

175. Captain E. C. Hart, R.E., Executive Engineer, Khándesh Division, reports that no work was executed during 1884.

AHMEDNAGAR.

176. Mr. Pottinger, C.E., Executive Engineer, Ahmednagar, states that no work was executed during 1884.

SIRUR.

177. Mr. Howard, C.E., Executive Engineer, Poona District, reports that no work was executed at Sirur during the year under report.

PURANDHAR.

178. Mr. Howard, C.E., Executive Engineer, Poona District, reports that the following work was executed during 1884:—

Certain additions and improvements to the Matron's quarters in the Female Hospital at Purandhar.

The matrons' quarters, which are situated in the northern end of the hospital, had two doors opening in the closed verandah of the hospital. Such an arrangement being objectionable the two doors were removed and the openings built up. One of the removed doors has been refixed in the dining room and the other in the bath room. Masonry walls across the verandahs in continuation of the main end wall of the hospital have been constructed and to cut off direct communication with the wards a door has been inserted in the new cross wall in the west verandah to obtain ready access to the sick at all seasons.

The space in the quarters being limited, and as no latrine accommodation has been provided for these quarters, the north-west end verandah has been converted into a bath room for the accommodation of the matron and her children and the existing bath room used as an additional bed room.

As the two end verandahs are enclosed by dwarf walls and teak trellis work two doors one in each end wall of the verandah have been pierced.

Estimated cost ...	...	...	Rs.	184	0 0
Actual expenditure	...	...	„	183	13 7

SHOLA'PUR.

179. The Executive Engineer, Sholápur Division, reports that no sanitary work was executed during the year.

POONA.

180. Lieutenant-Colonel Ducat, R.E., Executive Engineer, Poona and Kirkee, reports that the following work was undertaken during 1884:—

Making roads to the latrines of the Native Infantry Regiments at Poona in progress.

Actual cost up to 31st December ... ... Rs. 61.

KIRKEE.

181. Lieutenant-Colonel Ducat, R.E., Executive Engineer, Poona and Kirkee, states that the following sanitary works were undertaken during the year 1884.

A subsoil irrigation plot to the lavatory of No. 2 Barrack has been constructed for the disposal of the sullage water.

Thirty feet in rear of the lavatory a plot 20′ × 20′ has been dug out to the depth of 2½ feet. On the bottom of this pit a series of drain pipes has been laid, and the plot filled in with a mixture of black and red soil over the drain pipes. The foul water from the lavatory is received into a masonry man-hole covered with an iron grating, from which it flows through a water-tight glazed stone-ware pipe into a second man-hole communicating with the loose set drainage pipes under the irrigation plot, through the joints of which the water finds its way into the soil and feeds the grass with which the plot is planted.

The glazed stone-ware pipe is properly trapped and ventilated to prevent any gases from the irrigation plot getting into the lavatory building.

Estimated cost ...	...	...	Rs.	139	0 0
Actual cost ...	...	...	„	138	14 11

Latrines at new Jhansi.—Two latrines, one for men and one for women, with two seats in each, have been constructed in the new Jhansi bázár for the use of camp followers. The latrines are on the new District Model.

Estimated cost...	...	...	Rs.	155	3 1
Actual cost ...	...	...	„	154	13 3

KHANDA'LA.

182. No works were executed at Khandála during the year 1884.

SA'TA'RA.

183. Mr. Maclaran, C.E., Executive Engineer, Sátára, reports that the following work was undertaken during 1884:—

New Native Infantry Lines are being constructed regimentally.

BELGAUM DISTRICT.

Stations.—KOLHA'PUR, BELGAUM AND DHA'RWA'R.

KOLHA'PUR.

184. Lieutenant-Colonel Seton, R.E., Executive Engineer Belgaum, states that no sanitary works were undertaken during the year under report.

BELGAUM.

185. Lieutenant-Colonel Seton, R.E., Executive Engineer, Belgaum, states that the following work was executed during 1884:—

Making a drain to carry off waste water in the end verandah and providing a general board to the dwarf wall of verandah of ward No. 5 of the Station Hospital at Belgaum. A small drain to carry off the waste water from the filter has been provided.

A six-inch plank has been fixed on the dwarf wall of the upper verandah.

Estimated cost	Rs. 39
Actual cost	„ 37

DHA'RWA'R.

186. No works were undertaken at Dhárwár during the year 1884.

SIND DISTRICT.

Stations.—KARÁCHI, HYDERABAD AND JACOBABAD.

KARA'CHI.

187. Colonel Gambier, R.E., Executive Engineer, Lower and Central Sind, reports that the following works were undertaken during 1884:—

Improving the drainage of the masonry wash hand-stands in the lavatories of the Napier Barracks at Karáchi.

Estimated cost	Rs. 503 0 0
Actual cost	„ 478 10 0

Improving the ventilation of the Plunge Bath, Napier Lines, at Karáchi.

Estimated cost	Rs. 154 0 0
Actual cost	„ 146 15 3

HYDERABAD.

188. Colonel Gambier, R.E., Executive Engineer, Lower and Central Sind, states that the following sanitary works were executed during the year 1884.

Removing low partition walls from the European Barracks at Hyderabad.—These partition walls between the archways of the inner verandah were removed for better ventilation.

Estimated cost	Rs. 130 0 0
Actual cost	„ 124 14 8

Providing Portland cement concrete drains at the sides of the Royal Artillery stables at Hyderabad.—The urine of the horses did not flow along the old mud drains, and saturated the surrounding ground, thus causing an offensive smell. These were therefore replaced by drains of cement concrete plastered with cement.

Estimated cost	Rs. 544 0 0
Actual cost	„ 536 13 2

Improving the drainage of Military buildings.—This work was in progress last year and has now been completed.

Estimated cost	Rs. 6,232 0 0
Actual cost during 1884	„ 5,814 14 3

JACOBABAD.

189. No work was executed at Jacobabad during the year 1884.

ADEN BRIGADE.

ADEN.

190. Major Twemlow, R.E., Executive Engineer, Aden, reports that the following works were executed during 1884:—

191. *Re-roofing upper male ward of European Infantry Hospital.*—This building had a sloping jhowlie roof. This was removed the walls raised so as to give clerestory ventilation, the plan re-arranged so as to give two wards instead of one and a concrete roof supported on iron work.

Actual cost ... ... Rs. 6,730

192. *Laying pipes from iron water tanks to Native Infantry Lines.*

The piping has been laid and a masonry tank erected to hold a fortnight supply, also a shed for distributing purposes.

Actual cost ... ... Rs. 3,242

193. *Laying pipes to convey condensed water from Seera to tank in Little Isthmus.*

The condensed water is now conveyed by pipes through the main tunnel into the Isthmus where there are already large storage tanks capable of holding a six months' supply of water for the whole garrison.

Actual cost ... ... Rs. 3,382-13-10.

QUETTA DISTRICT.

Stations.—SIBI, SHARIGH, GANDAKINDUFF, DUKKI AND BOLAN PASS.

SIBI.

194. The Executive Engineer, Sibi Division, reports that the following work was undertaken during the year 1884 :—

Drainage of low ground east of the Railway line.—The work consists in raising the road on the north of the station to form a bund and in providing a deep channel (with raised banks) from north to south of the station to pass off the flood-water.

The local drainage of the low land east of the deep drain is carried off independently by a shallow surface drain running parallel to the deep drain and eventually tailing into it in progress.

Estimated cost ... ... Rs. 3,000.
Actual cost ... ... „ 2,400.

195. No sanitary works were undertaken at Sharigh, Gundakinduff, Dukki and in Bolan Pass.

SECTION IX.

SANITARY WORKS—CIVIL.

196. The original reports received from the several municipalities have been abstracted and the results are here given.

197. The total annual income of the municipalities during the year 1883-84 was Rs. 29,86,674 and the sum expended on conservancy by them was Rs. 6,60,806.

198. The details of income and expenditure on conservancy in each municipal town of each Revenue Division will now be given:—

NORTHERN DIVISION.

District.	Name of Municipality.	Population.	Annual Income.	Expenditure on Conservancy.
			Rs.	Rs.
Ahmedabad.	1. Ahmedabad City ..	124,767	2,45,279	59,236
	2. Dholka Town ..	17,716	11,710	1,891
	3. Dhandhuka Town .	10,044	9,157	1,436
	4. Virangám „ ..	18,990	16,959	1,666
	5. Parántij „ ..	8,353	3,780	1,483
	6. Modása „ ..	7,081	4,791	1,974
	7. Gogha „ ..	7,063	2,271	551
	Total ..	193,964	2,93,947	68,237
Kaira.	8. Kaira Town	12,640	9,120	2,591
	9. Mehmadabad Town..	8,173	4,078	441
	10. Nadiád „ ..	23,304	19,315	4,183
	11. Kapadvanj „ ..	14,442	7,982	1,377
	12. Dákor „ ..	7,771	12,282	2,739
	Total ..	71,330	52,777	11,330
Panch Mahals.	13. Godhra Town ..	13,342	5,046	792
	14. Dohad „ ..	12,394	5,755	935
	Total .	25,736	10,801	1,727
Broach.	15. Broach City	37,281	80,622	9,709
	16. Ankleshvar Town ..	9,535	12,599	1,321
	17. Jambusar „ ..	11,479	7,005	1,427
	Total ..	58,295	1,00,226	12,367
Surat.	18. Surat City	107,154	2,54,078	94,423
	19. Ránder Town ..	9,416	14,587	1,277
	20. Bulsár „ ..	13,229	18,377	3,283
	21. Mándvi „ ..	4,744	4,888	595
	Total ..	134,543	2,91,930	99,578
Thána.	22. Thána Town ..	14,456	14,919	4,512
	23. Kalyán „ ..	12,010	14,625	4,506
	24. Bhiwndi „ ..	13,837	12,574	2,558
	25. Máhim „ ..	7,122	2,281	502
	26. Bassein „ ..	10,257	8,092	1,226
	27. Bándra „ ..	14,987	21,651	2,970
	28. Kurla „ ..	9,715	4,806	2,655
	Total ..	83,384	78,928	18,978
Kolába.	29. Alibág	6,376	7,804	6,878
	30. Pen	8,082	6,239	4,047
	31. Roha Ashtami ..	4,894	3,500	2,453
	32. Mahád	6,804	5,665	2,124
	33. Panvel	10,351	3,631	1,052
	34. Uran	10,149	2,388	1,102
	Total ..	46,656	22,230	18,256
	Grand Total ..	593,908	8,57,839	2,30,473

199. *Water-supply.*—No change from that of last year. The existing arrangements are nearly the same as those in the previous years. The supply is mainly from rivers, tanks and wells. The last-named are periodically cleaned. During the hot season temporary wells are sunk in river-beds if they run dry. At Ahmedabad formerly about 133,000 gallons of water were raised daily from the river Sábarmati, but now 200,000 gallons are pumped up per day. Formerly the water was obtained between the hours of 7 P.M. and 4 A.M. but since January 1884 it is pumped between 1 A.M. and 11 A.M. From analysis made by the Chemical Analyser it was found that the water raised between the latter hours contained less impurities. Gogha gets its chief supply from the Sonona tank about a mile from the town; the water is brought in a closed channel to a masonry reservoir situated in the centre of the town; the water is filtered before being conveyed to the reservoir. At Broach the water-supply is far from satisfactory, and is insufficient. The richer class collect rain-water in cisterns or reservoirs underneath their houses upon which they depend for their drinking water, but the principal source is from the river and wells. At Surat also the supply is far from good; the municipality has under its consideration a scheme to supply the city with good drinking water from the river Tápti. At Ránder nearly all the inhabitants use the water of the river Tápti; well water is preferred, but there are only 8 wells containing drinkable water. Thána gets its supply from the Pokharan reservoir. At Kurla the supply is insufficient; there are a few wells, but the water is more or less impure, and many of them run dry before

the rainy season. At Bándra the water is brought by pipes from the Vehar lake. Bhiwndi gets its water-supply from a lake about a mile from the town; the water is brought by pipes to ten cisterns which are used as dipping wells. At Alibág the water is brought by iron pipes from the Wesbur tank about 2 miles to the north of the town. At Pen the water is brought by large pipes from a tank about a mile from the town to three reservoirs. At Roha Ashtami water is brought by pipes from a tank about 5 miles from the town.

200. *Drainage.*—There are open masonry side drains to the principal roads and mere earth trenches to others to carry off rain-water. At Kaira there are under-ground drains in 5 of the main streets.

201. *Cesspools.*—There are no municipal cess-pools, but almost all private houses have them, and the owners see to their cleanliness. At Ahmedabad almost every house in the city has a cess-pit called "Khálkuva" into which urine, privy water and all the dirty water of the house is discharged; a description of a "Khálkuva" was given in last year's report. At Dákor no more cess-pools are permitted to be built.

202. *Scavenging.*—A staff of sweepers is entertained by each municipality to keep the towns and streets clean. There are dust-bins in almost every town. At Gogha and Ankleshvar the scavenging is done by contract. The street sweepings are carted to depôts outside the town and sold by auction. At Ahmedabad poudrette was manufactured and sold for Rs. 4,406; it is under contemplation to remove the existing night-soil depôts to a distance of about 2½ miles from the city in a south-easterly direction. At Jambusar and Ránder the sweepings are thrown into hollows outside the towns. Poudrette is manufactured at Surat and Bulsár.

203. *Latrines.*—Most of the municipal towns have public latrines, which are well looked after by municipal sweepers. In some towns private privies are also cleaned by municipal sweepers. Night-soil was carted to depôts about a mile from the towns. At Ahmedabad it was buried in pits. At Nadiád it sold for Rs. 301. In the following towns there are no latrines:—Godhra, Bassein and Roha Ashtami.

There are no regular built latrines at Kapadvanj, but two open lots of land are set aside by the municipality, one outside the south-gate and the other outside the Mithatara gate. At Broach also there are no regular built latrines; open enclosures are allotted to the public.

204. *Urinals.*—There are urinals in the municipal towns of the Ahmedabad and Kaira Districts and at Surat City, Jambusar and Ankleshvar towns, which are washed out daily and kept clean.

205. *Markets.*—In the majority of the municipal towns there are no regular built markets; weekly market sales are held on open plots of ground.

206. *Burial Grounds and Cremation Gháts.*—There are several of both outside each municipal town. Cremation gháts are generally on the banks of rivers.

207. *New Works*—At Ahmedabad Rs. 2,134 were expended, of which Rs. 1,639 were for drains and Rs. 495 for public latrines and urinaries. At Viramgám a new well was sunk. Rs: 1,488 were spent on water-works. At Nadiád Rs. 25 were expended on two sheds, Rs. 394 on two masonary inclines at Konthoria Chukla and Nagarkui, and Rs. 311 on a cattle-pound. At Kaira Rs. 555 were spent in constructing a portion of the town wall on the western side, to guard against the flood of the Wotrack river, and Rs. 285 on the Ahmedabad gate. At Broach Rs. 2,507 were spent on improving slopes, Rs. 1,917 for extending the Hajee Peer Karmani Ovara, Rs 17,084 on roads, Rs. 238 for placing pipes across the Bund Ratan Tank, Rs. 53 for fixing railings on the Hospital compound and Rs. 1,208 for extending the retaining wall of the water-course. At Ránder three sets of latrines and side-drains were constructed. At Mándvi a well was sunk. At Surat Rs. 12,283 were expended, of which Rs. 1,157 were for latrines, Rs. 9,899 for extending the public park, and Rs. 232 on a cattle-pound. At Thána a short road was constructed. At Kalyán Rs. 1,367 were spent in im-

proving Lendi Tank. At Bándra new roads and masonary drains were constructed, at Máhím Rs. 249 on a latrine and Rs. 141 on a short road. At Bhiwndi a well was built.

CENTRAL DIVISION.

District.	Name of Municipality.	Population.	Annual Income.	Expenditure on Conservancy.
			Rs.	Rs.
Ahmednagar.	1. Ahmednagar.. ..	32,903	54,611	13,884
	2. Bhingár	5,106	3,160	1,591
	3. Sangamner	8,796	7,051	2,998
	Total ..	46,805	64,822	18,473
Khándesh.	4. Jalgaon	9,918	23,089	4,158
	5. Varangaon	2,214	1,373	328
	6. Erandal	11,501	4,935	2,035
	7. Párola..	12,354	3,873	1,095
	8. Dharangaon	13,061	5,035	1,266
	9. Amalner	7,627	2,404	505
	10. Bhadgaon	6,537	2,322	565
	11. Máheji..	2,000	1,602	245
	12. Songir	4,277	2,153	424
	13. Prakásha	5,651	1,664	654
	14. Nandurbár	6,841	3,947	1,231
	15. Táloda..	5,663	3,359	1,228
	16. Dhulia	78,449	29,175	6,528
	17. Sindkheda	4,293	1,413	365
	18. Betávad	5,282	1,220	338
	19. Shirpur	7,612	3,720	1,202
	20. Chopda	13,932	3,580	1,560
	21. Sháhada	5,441	2,876	1,018
	22. Bhusával	5,744	10,521	2,353
	23. Sávda	3,642	2,327	396
	24. Yával	8,989	1,674	604
	Total ..	208,418	1,12,031	28,168
Násik	25. Násik	24,101	39,642	18,157
	26. Trimbak	3,801	2,736	761
	27. Sinnar..	7,950	1,840	800
	28. Igatpuri	6,306	3,595	1,112
	29. Málegaon	10,622	11,812	3,755
	30. Yeola	17,695	26,889	3,260
	Total ..	70,475	86,514	27,845

District.	Name of Municipality.	Population.	Annual Income.	Expenditure on Conservancy.
			Rs.	Rs.
Poona.	31. Poona City	99,622	2,12,219	60,303
	32. Indápur	4,242	2,515	388
	33. Bárámati	5,272	5,885	1,425
	34. Sásvad	5,624	3,364	553
	35. Jejuri	3,245	4,079	416
	36. Ghodnadi or Sirúr..	4,472	7,370	1,639
	37. Talegaon Dhamdhera	3,620	698	178
	38. Junnar	10,373	4,879	596
	39. Talegaon Dábháda.	4,256	4,543	536
	40. Khed	7,015	1,641	329
	41. Alandi	1,754	4,977	761
	42. Lonávla	3,334	4,278	515
	Total ..	152,789	2,56,149	67,439
Sátára.	43. Karád	16,778	5,071	696
	44. Vita	4,477	779	135
	45. Sátára	28,601	46,759	6,254
	46. Rahimatpur	6,082	1,477	240
	47. Wái	11,676	5,735	2,123
	48. Malcolmpeth ..	3,244	13,991	816
	49. Islámpur	3,949	1,533	187
	50. Tásgaon	10,206	4,690	476
	51. Ashta	9,548	1,285	316
	52. Pusesávli	2,638	819	120
	53. Máyni	2,997	488	145
	54. Mhasvad	5,881	2,544	145
	55. Shingnápur.. ..	1,293	6,137	1,380
	Total ..	106,175	91,303	12,992
Sholápur.	56. Sholápur City ..	59,890	1,81,322	26,840
	57. Bársi	16,126	31,344	4,580
	58. Karmála	5,071	4,341	738
	59. Pandharpur ..	16,910	66,280	28,549
	60. Sángola	4,722	1,463	510
	Total ..	102,719	2,34,750	61,217
	Grand Total ..	687,381	8,45,569	2,16,135

208. *Water-supply.*—The existing arrangements are the same as those during last year. The supply is obtained from rivers, tanks and wells; temporary wells are dug in the river-beds when they run dry. Some of the public wells were cleaned during the year. At Ahmednagar a sub-committee, with the Executive Engineer Mr. Pottinger as chairman, has been appointed to enquire into and report upon the best means of improving and increasing the water-supply of the city. The town of Bhingár has a supply of excellent water which is brought to it by an aqueduct from springs in the hills. At Sangamner part of the river Pravara is reserved for drinking purposes, and a peon is appointed to remove impurities from it. Prakásha has an abundant supply of water, being situated at the junction of the Tápti and Gomai rivers. Jalgaon town is supplied with water from the Melonu tank, which is brought in by iron pipes. At Násik a temporary earthen dam is every year thrown across the river near Dhangarutára; it is under contemplation to build a substantial masonry dam near the Sanyási's Math far above the inhabited portion of the city. At Yeola the people experience great inconvenience from the scanty supply of water; arrangements are being made for increasing the supply. The City of Poona gets its supply from four aqueducts and the Mutha Canal. The supply is about 15 gallons per head of population. 40 stand-pipes in 12 localities were put up during the year. At Talegaon Dábháda a new tank to the west of the town is under construction, and it is proposed to take the water from it into the town by iron pipes and distribute it into cisterns. At Lonávla from the G. I. P. Railway Company's reservoir at Buslia, there are six taps in different places, but these are not enough, and it is hoped before long the permission of Agent of the Railway may be obtained to erect a few more. At Malcolmpeth a new well was constructed during the year in a ravine between Sassoon point and the Station Dharmshála; it has an abundant supply which is of excellent quality. The tanks and wells in the station have been thoroughly cleaned out and the Bishop's well has been covered; a 2″ iron pipe is laid from it to a lower level where the water is drawn off by a cock from which

the bhisti's pakháls are filled. At Sátára the Kas water-works are in progress and are expected to be completed this year. At Sholápur the supply is brought into the city and Sadar Bázár through cast iron pipes; during the year 1″ wrought iron and 2″, 3″, 6″, 9″ and 12″ cast iron pipes were laid down; one stand-pipe and 6 stand-posts were erected.

209. *Drainage.*—There is no regular system of drainage beyond open masonry-side drains to the principal streets and mere earth trenches to other roads to carry off rain-water. In some towns the side masonry drains are covered. At Ahmednagar the subject of improving the drainage of the city is under the consideration of the municipality. At Sangamner two branch drains were constructed and joined on to the main drain. At Dhulia there are closed drains; they are opened and cleaned once a year. At Násik ten drains were cleaned and the cesspool at Báláji cleaned out and covered. In the City of Poona there has been no change beyond building U-shaped gutters and sewers 2,661 feet long. At Talegaon Dábháda there is a drain under one of the principal roads to which the sewers of houses on both sides of the road are joined. Sáswad has a drain under ground which is connected with the houses in the streets through which it passes. It empties itself into the river Chámbhli. At Sholápur there are four under-ground sewers in the centre of the roads; during the year two branch sewers were constructed.

210. *Cesspools.*—There are no municipal cesspools, but most private houses have them. The Ahmednagar Municipality permits cesspools, and there are about 1,400 in the city; the water from them is daily thrown over the ground to evaporate. At Shirpur and Sindkheda the cesspools are periodically cleaned by municipal servants. At Násik after the close of the monsoon open cesspools were dug along the river bank from Jánappa's Ghát to Báláji's temple to receive the drainage of that section of the city. At Sátára there are 34 masonry cesspools adjoining the municipal latrines, which are constantly cleaned. At Sholápur the foul water is removed by the municipality in cylindrical carts, which removed about 12,000 gallons of water daily during the year under report.

211. *Scavenging.*—Establishments are kept by the various municipalities to keep the towns and streets clean. Street-sweepings are removed to depôts some distance from the town and are either sold or buried. In the City of Ahmednagar there are 140 masonry dust-bins and 13 iron boxes to hold town sweepings. Most of the towns have dust-bins into which sweepings are thrown. Poudrette was manufactured at Poona, Sholápur, Dharangaon and Násik. At Poona Rs. 17,624 were realized by the sale of poudrette and at Sholápur Rs. 1,275.

212. *Latrines.*—There are public latrines in almost all the municipal towns, and sweepers are entertained to keep them clean. Private privies in several of the towns are also cleaned by municipal sweepers. At Ahmednagar a special sub-committee has been nominated to enquire and report the number of additional latrines they would recommend and the localities where they should be erected. New latrines were built during the year in the following towns: Násik, Yeola, Málegaon, Poona, Lonávla, Mháswad, and Pusesávli. At Vita there are four public latrines, but as they are situated at inconvenient places they are not used.

213. *Urinals.*—There are a few in the following towns: Ahmednagar, Dhulia, Násik, Poona, Sholápur and Pandharpur. The urinals are washed and disinfected daily.

214. *Markets.*—Only some of the municipal towns have market buildings; weekly sales are held on open plots of ground with raised sitting places (otas.)

215. *Burial Grounds and Cremation Ghâts.*—There are a few of both outside each town.

216. *New Works.*—Ahmednagar Rs. 10,531 were expended on new works, of which Rs. 2,012 were spent on water-works, Rs. 8,115 on markets, Rs. 83 on drains, Rs. 56 on latrines, Rs. 19 on dust-bins, and Rs. 246 on bullock-shed for conservancy carts; at Sangamner Rs. 293 on drains, Rs. 1,823 on latrines and Rs. 88 on urinals; at Amalner Rs. 50 on drains, and Rs. 72 on latrines; at

Erandal Rs. 510 on drains, and Rs. 27 on latrines; at Párola Rs. 179 on drains and gutters; at Máheji Rs. 20 on a latrine. At Chopda new drains 909 feet in length were constructed. At Dhulia a road 750 feet long was constructed, 841 yards of masonry drains, 6 dust-bins and 10 urinals. At Jalgaon latrines and gutters were built. At Násik two new latrines were constructed. At Málegaon 1,000 yards of side-drains to roads were constructed; Rs. 1,200 were spent on 2 latrines and Rs. 33 on dust-bins. At Poona Rs. 54,527 were expended, of which Rs. 45,749 were for vegetable and fruit market, Rs. 2,248 on meat market, Rs. 417 on latrines, Rs. 2,767 on cremation ghát, and Rs. 3,346 on new drains and sewers. At Lonávla two latrines were constructed and side drains to roads. At A'landi dust-bins were put up. At Malcolmpeth a new well was sunk, and two slaughter-yards were built. At Sátára a slaughter-yard was built. At Mhasvad one well and 4 latrines were constructed. At Sholápur Rs. 10,297 were spent on water-works, Rs. 1,660 on drains and sewers and Rs. 616 on dust-bins. At Bársi 4 wells were sunk. At Pandharpur new latrines were built and stand-posts for obtaining water were erected.

SOUTHERN DIVISION.

District.	Name of Municipality.	Population.	Annual Income.	Expenditure on Conservancy.
			Rs.	Rs.
Kánara.	1. Kárwár	13,761	9,362	3,117
	2. Kumta	10,629	12,522	269
	3. Sirsi	5,633	9,713	1,848
	4. Haliyál	5,527	5,069	1,553
	5. Gokák	4,207	1,253	258
	6. Ulvi	233	657	4
	temporary ..			
	Total ..	39,990	38,576	7,049
Belgaum.	7. Belgaum	23,115	36,590	20,416
	8. Yaragatti	4,491	1,447	441
	9. Nipani	9,777	11,784	1,362
	10. Sankeshwar	7,133	3,016	753
	11. Gokák	10,307	7,643	4,001
	12. Yellamma Hill, temporary	*	6,186	120
	13. Bágalkot	11,186	14,544	5,753
	Total ..	65,909	81,210	32,846
Kaládgi.	14. Kaládgi	7,024	2,400	791
	15. Bágalkot	12,850	10,612	3,178
	16. Ilkal	9,574	4,450	1,572
	17. Bijápur	11,424	4,452	1,172
	Total ..	40,872	21,914	6,623
Ratnágiri.	18. Vengurla	8,947	16,510	5,761
	19. Rájápur	7,448	9,244	6,060
	20. Ratnágiri	12,616	6,491	2,205
	21. Chiplún	12,065	51,336	922
	22. Dápoli	2,652	789	416
	Total ..	43,728	84,340	15,369
Dhárwár.	23. Dhárwár	26,520	24,172	6,043
	24. Hubli	33,677	33,143	12,342
	25. Gadag-Betgeri ..	17,001	17,604	2,695
	26. Navalgund	7,810	6,211	511
	27. Nargund	7,874	6,866	741
	28. Háveri	5,652	2,944	607
	29. Byádgi	4,001	5,642	618
	30. Ránebennur ..	10,202	4,844	997
	31. Guddgudádpur, temporary	591	803	16
	Total ..	1,16,328	1,01,928	24,270
	Grand Total ..	306,927	3,27,968	86,157

*There is no resident population here, but about one lákh people visit this shrine during the year.

217. *Water-supply.*—No change from that of last year. The supply is obtained from rivers, tanks and wells. A few of the public wells were cleaned during the year. At Sirsi well water is only used for drinking purposes, but the water in private wells is liable to be contaminated as the majority of these wells have pit-privies within a distance of 50 feet. At Yellama Hill a new well was built during the year. At Gokák and Bágalkot the water-supply is now drawn from the river Ghataprabha which flows close to these towns. At Hubli peons are employed to guard the water of the tank from being defiled. At Chiplún the water is brought from the Shiv River, a distance of about four miles; there are stand pipes in various places and pipes are laid on to houses.

218. *Drainage.*—There are drains to roads to carry off rain-water. In the main streets there are open side drains and mere earth trenches to other roads. The drains are cleaned periodically. At Belgaum some of the masonry drains are covered with stone slabs; these are opened annually and cleaned.

219. *Cesspools.*—There are no municipal cess-pools but most private houses have them. At Gokák almost every private house has a deep cesspool for the reception of filthy water which is removed outside the town by the owners when the pits are full.

220. *Scavenging.*—A staff of sweepers is entertained by the several municipalities to keep the town and streets clean. Street-sweepings are at first placed in dust-bins and afterwards removed to places outside the town, where they are either sold, burnt or buried in pits. The street-sweepings of Kánara, Bágal-

kot, Gadag, Betgeri and Kumpta were utilized in filling up low and marshy ground. At Belgaum the sweepings were burnt and the ashes used for manufacturing poudrette.

221. *Latrines.*—Some of the municipal towns have public latrines. At Kánara, Kumta and Athni the night-soil is deposited in pits at a distance from the towns. At Sirsi there are about 218 private pit-privies in the town; these are situated within a distance of about 50 feet from the wells in the same compound and are never cleaned. At Yellama Hill there are no public latrines and the pilgrims go about half a mile off in every direction for natural purposes; it would be an improvement if spots were selected and trenches dug. At Ilkál on two sides of the town fields have been bought, fenced and set apart for use as latrines, also new iron privies with 10 seats have been erected.

222. *Urinals.*—At Sirsi there is one which is attached to the Anglo-Vernacular School. At Hubli there are two. These are cleaned every morning.

223. *Markets.*—No regular buildings for markets; there are different places set apart for the sale of grain, vegetable and other articles. At Kumta a fish market was built during the year. At Haliyál a shed for sale of vegetable was completed.

224. *Burial Grounds and Cremation Gháts.*—There are a few of both outside each town.

225. *New Works.*—At Kumta a Fish Market was constructed at a cost of Rs. 1,175. At Sirsi Rs. 815 were spent in constructing a well, Rs. 194 on a dead-house, Rs. 57 on a latrine and Rs. 347 on drains. At Haliyál a market shed was constructed. At Belgaum a corrugated iron and roofed shed for the preparation of poudrette was built, and 9 dust-bins were put up in different parts of the town. At Athni a new well was sunk for Rs. 499 and two cisterns built for Rs. 83. At Gokák Rs. 585 were spent on latrines and Rs. 73 on dust-bins. At Bágalkot Rs. 4,926 were expended on roads. At Ilkal an embankment to protect the town from floods of the nála was constructed. At Ve[illegible]urla two water-troughs and ten dust-bins were built and at Chiplún a cattle-po[illegible] At Navalgund Rs. 200 were spent on water-works; at Nargund Rs. 35 on [illegible]ter-works and Rs. 24 on drains. At Haveri Rs. 559 were spent on drains and [illegible]. 75 on repairs to a tank. At Dhárwár Rs. 1,694 were expended on drains, R[illegible] 260 on dust-bins, Rs. 184 on a latrine, and Rs. 104 on a new well.

SIND DIVISION.

District.	Name of Municipality.	Population.	Annual Income.	Expenditure on Conservancy.	District.	Name of Municipality.	Population.	Annual Income.	Expenditure on Conservancy.
			Rs.	Rs.				Rs.	Rs.
Karáchi.	1. Karáchi	68,332	4,30,389	54,064	Shikárpur.	25. Shikárpur	42,496	68,187	[illegible]45
	2. Kotri	3,922	15,996	3,109		26. Sukkur	27,389	1,48,116	[illegible]48
	3. Manjhand	2,654	2,229	432		27. Garhi Yásin ..	5,341	8,365	[illegible].71
	4. Sehwan	4,524	7,001	1,841		28. Lárkhána	13,188	28,846	[illegible],559
	5. Bubak	2,836	4,923	959		29. Kambar	6,133	6,148	561
	6. Dádu	2,270	2,556	732		30. Rato-dero	3,170	3[illegible]	225
	7. Johi	1,120	1,377	335		31. Mehar	1,944	2,[illegible]	[illegible],390
	8. Tatta	8,830	11,689	2,035		32. Khairpur Náthesháh	1,767	1,215	410
	9. Keti	2,141	4,837	688		33. Rohri	10,224	14,869	151
	10. Mirpur Batoro ..	3,102	5,024	973		34. Ghotki	3,245	2,443	
	Total ..	104,731	4,86,021	65,168		35. Ubauro	2,267	967	36,516
Hyderabad.	11. Hyderabad	45,195	1,11,816	11,888		Total ..	117,364	2,85,013	
	12. Tando Jam	2,072	1,125	300	Thar and Párkar.	36. Umarkot	2,828	4,782	899
	13. Tando Muhammad-khán	3,281	5,063	1,414		37. Mitti	2,594	2,092	568
	14. Hála	3,967	3,913	898		38. Nagar	1,773	3,522	791
	15. Matári	5,054	3,110	809		Total ..	7,195	10,396	2,258
	16. Tando Alahyar ..	4,170	5,455	1,102	Upper Sind Frontier.				
	17. Tando Adam ..	4,253	6,681	710					4,510
	18. Nasarpur	2,296	2,119	594					
	19. Shahdádpur	2,068	2,685	442					
	20. Kandiaro	2,367	1,871	335					
	21. Naushahro	3,110	1,668	373					
	22. Tháru Sháh	2,236	1,107	263					
	23. Bhiria	2,488	2,007	301		39. Jacobabad	7,365	24,505	
	24. Moro	2,067	1,053	250					4,510
	Total ..	35,534	1,49,363	19,589		Total ..	7,365	24,505	1,28,041
						Grand Total ..	322,189	9,55,298	

226. *Water-supply.*—The existing arrangements are the same as those of last year. The supply is from rivers, tanks and wells. The wells are c[illegible]leaned

annually. The tanks are filled during the inundation season. The Karáchi water-works were completed during the early part of the year and the distribution of Malir water has been satisfactory. At Mánjhand and Bubak when the rivers run dry temporary wells are dug in their beds. Canal water is also used for drinking purposes in the following municipal towns : Sehwan, Dádù, Mirpur Batoro, Tando Jám, Hála, Matári, Tando Alahyar Nasarpur, Mehar, Khairpur and Jacobabad. At Hyderabad eight private water services were put up during the year. At Shikárpur the practice still prevails of throwing rice and other matters into some of the wells.

227. *Drainage.*—Surface drains to roads to carry off rain-water. Some of the towns have no surface drains; these towns are on an eminence and the rainfall is so very small that drainage is not required, as any rain that does fall quickly flows off the streets. At Shikárpur there are hardly any drains even to carry away the rain-water; at present after a fall of rain, if only a shower, the streets which are not paved are in many places rendered impassable from the mud and filth washed down from the house-tops and from private court-yards, which generally take some days to remove; the stench arising from this is unbearable. At Sukkur the new drainage scheme, as far as the underground drains are concerned, was completed during the year; the surface drains which form a most important part have not yet been commenced.

228. *Cesspools.*—Almost all private houses have them; they are periodically cleaned. At Karáchi the building of new pucka cesspools is encouraged; their construction is carefully supervised and their conservancy is well attended to. At Shikárpur those under the control of the municipality are kept clean and deodorised with quick lime.

229. *Scavenging.*—A staff of sweepers is employed by the various municipalities to keep the town and streets clean. The street-sweepings are taken to a distance and burnt. At Karáchi moveable dust-bins were introduced in place of the old masonry ones. At Hyderabad the sweepings were carted outside the town and utilized to raise one of the roads. Galvanized manure carts are used to remove night-soil and foul water.

230. *Latrines.*—There are public latrines in almost all the municipal towns and they are kept clean. The night-soil is removed to a distance and is either buried or deposited with street-sweepings. At Naushahro, Tháru Sháh, Moro, and Kandiaro there are public latrines, but the people prefer going out to the jungle although the latrines are regularly cleaned. Poudrette was manufactured at Bubak, Shikárpur and Sukkur. At Shikárpnr a halálkhor service has not yet been established; the people use the tops of their houses as latrines.

231. *Urinals.*—There are a few at Karáchi.

232. *Markets.*—The majority of the towns have market buildings; they are kept clean and well looked after.

233. *Burial Grounds and Cremation Gháts.*—There are a few of both outside each town. Cremation Gháts are generally on the banks of rivers.

234. *New Works.*—At Karáchi Rs. 3,796 were expended on paving and Rs. 2,244 on deepening and cleaning road-side drains and gutters. At Kotri Rs. 469 were spent on seven small culverts on roads, and Rs. 638 in constructing bunds for the protection of the town from the river; at Dádu Rs. 50 on steps to the bathing ghát. At Hyderabad the following were undertaken: drainage of Jayhakah and Khalian lanes, waste water drains of city services, and cleaning Fort Tank and Shah Kalam Tank. At Tando Muhammad Khán Rs. 140 were spent on 4 road-side drains; at Hala new bathing steps to Aligany coast. At Matari a market and bathing ghát were erected. At Shahdádpur bathing ghát and steps and a shed for bullocks were erected. At Nasirpur a well, a market and cremation ghát were built; at Shikárpur a slaughter-yard; streets paved. At Sukkur the new drainage scheme was completed. At Ratodero Rs. 179 were spent on water-works. At Mehar Rs. 147 were spent on latrines and Rs. 30 on a cremation ghát. At Khairpur Nátheshah a new market was completed. At Umarkot Rs. 306 were spent on latrines, Rs. 85 on water-

works and Rs. 23 on market roof. At Mitti Rs. 287 were expended on water-works and Rs. 20 on repairs to a latrine. At Jacobabad drains were constructed for carrying off surface drainage, and a fish market.

LOCAL FUND CIRCLES.

Northern Division.

235. In the several tálukas of the Ahmedabad Collectorate Rs. 14,455 were expended by the Civil Agency and Rs. 3,177 by the Public Works Department on water-works. Of these sums Rs. 11,009 were for construction of 16 new wells and 7 tanks and for 6 filter wells in tanks, and Rs. 6,623 were spent on repairs to wells and tanks. In the Kaira Collectorate Rs. 19,503 were expended on water-works, of which Rs. 9,714 were for new wells and Rs. 9,789 for new tanks. In the Panch Maháls District Rs. 5,196 were expended in constructing 10 new wells and Rs. 419 on repairs to wells and tanks. In the Broach Collectorate two new wells were constructed. In the Thána Collectorate Rs. 7,907 were spent on new wells, Rs. 700 on a tank, and Rs. 2,632 on repairs to tanks and wells. In the Kolába Collectorate Rs. 2,581 were expended on new wells and Rs. 2,607 on repairs to wells and tanks.

Central Division.

236. In the Ahmednagar Collectorate Rs. 4,873 were spent in the several tálukas on water-works. Fifteen new wells were constructed and old wells were repaired and deepened. In the Khándesh Collectorate, in the four tálukas of Amalner, Erandol, Chálisgaon and Páchora, Rs. 4,782 were expended in constructing nine new wells and in repairing old ones. In the tálukas of Nandurbár, Dhulia, Pimpalner, Sháháda and Taloda, fifteen small wells were built and old ones repaired. In Shirpur and Sindkheda tálukas two new wells were built and old ones repaired. In the Násik Collectorate Rs. 7,905 were expended in constructing new wells, Rs. 6,514 on repairs to wells, Rs. 1,864 on a tank, and Rs. 100 on a water-trough. In the Poona Collectorate Rs. 2,017 were spent on four new wells, Rs. 2,654 on repairs to wells, and Rs. 112 on repairs to two tanks. In the Sholápur Collectorate Rs. 4,707 were spent on conservancy.

Southern Division.

237. In the Belgaum Collectorate Rs. 13,242 were expended on sanitary works in the several tálukas at Saundatti. Rs. 545 were spent in reconstructing a well. In the Kaládgi Collectorate Rs. 4,353 were spent on tanks and wells. In the Dhárwár Collectorate Rs. 17,574 were expended in constructing a well and in improving and repairing tanks and wells.

Sind Division.

238. In the Karáchi Collectorate Rs. 942 were spent in constructing two wells and Rs. 249 on repairs to wells. In the Hyderabad Collectorate Rs. 233 were expended on a new well, Rs. 250 on a tank, and Rs. 410 on repairs to wells. In the Shikárpur Collectorate Rs. 7,280 were spent on new wells and Rs. 1,094 on repairs to wells. In the Thar and Párkar District Rs. 122 were spent on repairs to wells and tanks.

SECTION X.

PERSONAL PROCEEDINGS AND GENERAL REMARKS.

Personal Proceedings.

239. At the commencement of the year I was on tour in the Ahmednagar districts and then passed through the eastern tálukas of the Poona Collectorate on my way to Pandharpur in the Sholápur Zilla, after visiting which I proceeded *viâ* Sángola and Dufflápur to Athni in the Belgaum Collectorate where I inspected 4 Municipal towns and returned to Poona *viâ* Kolhápur and Sátára. In April I went to Ahmedabad to report on the suitability of the Gáikwár's Haveli for a Central Jail and on my return to Bombay proceeded to Násik in company with the Inspector General of Prisons to select a site for a Central Jail. I passed May at Mahábleshvar and spent the rains at Poona, but came down to Bombay in September to meet the English Cholera Commissioners. In October I proceeded to Ahmedabad and with the Inspector General of Prisons, selected a site for a Central Jail. On my return to Poona I visited Ahmednagar, but received the orders of Government to report on the sanitary condition of the mills and factories in Bombay in which work I was engaged until nearly the close of the year.

Appointment of a full-time Health Officer of the Port.

240. Among the more important events of the year I must notice the appointment of a full-time Health Officer of the Port which was sanctioned in Government Resolution, General Department, No. 1979, dated 10th June 1884. The Government of India stipulated that the officer nominated to the post should belong to the Bombay Medical Service and be placed under the orders of the Sanitary Commissioner.

Surgeon MacCartie, I.M.D., was accordingly appointed and took charge of his duties on the 16th June and Government was pleased to allow him a clerk, 2 peons, and to permit a steam-launch to be constructed for his use.

Procedure regarding Medical Inspection of Vessels and Bills of Health.

241. It had been customary up to this time for the Port Health Officer to sign a certificate of health without an inspection of the crew and passengers of outgoing vessels on the written statement of the Doctor of the ship or in his absence of the Master that his crew and passengers were free from infectious disease; but Government was pleased to direct that in all vessels proceeding to Aden, the Red Sea Ports, Suez, Europe *viâ* Canal, Persian Gulf, and Mauritius, a medical inspection of the crew and passengers should be made by the Health Officer of the Port. The following procedure is therefore observed. After an inspection of the crew and passengers the Health Officer gives the following certificate:—

A.

Bombay. 188 .

I hereby certify, after personal inspection that the leaves the Port with her officers, crew and passengers free from infectious or epidemic disease dangerous to life.

Health Officer of the Port.

As soon as the Health Officer gives his certificate a clean Bill of Health in the following form is delivered with the certificate to the Master of the ship:—

B.

This is to certify that leaves the Port of Bombay with the whole of her officers, crew and passengers free from any infectious disease dangerous to life and that there is no epidemic disease prevailing in the city and suburbs of Bombay.

Collector of Customs and Opium, Bombay.

Under Government Resolution No. 823, dated 6th March 1882, a Medical Board has been appointed for the express purpose of determining whether or not cholera is epidemic in the city, and the Collector of Customs is guided by the report of the Board on this point.

Vessels bound to ports other than those mentioned above are not inspected by the Health Officer of the Port but are furnished with the following Bill of Health :—

C.

This is to certify that there is no epidemic disease prevailing in the city and suburbs of Bombay.

Collector of Customs and Opium, Bombay.

As pointed out by Government there is no law to compel Masters of vessels to obtain Bills of Health, but those who are proceeding to European Ports cannot dispense with them.

Government was pleased to pass the following orders regarding the issue of Bills of Health to outward bound vessels in which cases of infectious disease are discovered on board,—Government Resolution, General Department, No. 2971, dated 19th August 1884 :—

"Persons suffering from infectious or epidemic disease should be removed to an hospital on shore; the vessel should be thoroughly fumigated and disinfected and all the remaining passengers, crew and officers should be very carefully inspected. If they are found to be apparently healthy the customary certificate may be granted with a note appended stating what had occurred and the precautionary measures taken."

Number of Square-rigged vessels and steamers inspected.

242. Surgeon MacCartie in his annual report explains that for reasons stated he was not able until the 10th August to carry out the orders of Government regarding the inspection of every individual on board outgoing vessels but since that date he has strictly obeyed the directions of Government and has inspected the following square-rigged vessels and steamers :—

Names of Ports to which sailed.	Number of Ships.	Number of Individuals comprising Crews.	Number of Passengers.	Total of Crews and Passengers.
Europe *viâ* Canal	114	7,391	1,732	9,123
Aden and Eastern Coast Africa	5	386	267	653
Red Sea Ports	3	151	46	197
Suez	1	91	895	986
Port Said	2	51	...	51
Mauritius	7	288	657	945
Persian Gulf	31	1,943	2,411	4,354
Grand Total ...	163	10,301	6,008	16,309

Native Craft.

And the following table shows the number of native craft inspected :—

Ports to which sailed.	Number of Vessels.	Number of Individuals Comprising Crews.	Number of Passengers.	Total of Crew and Passengers.
Persian Gulf Ports	45	773	118	891
Other Foreign Ports	29	613	109	722
Grand Total ...	74	1,386	227	1,613

In addition to the above, nine ships carrying 6,823 pilgrims were inspected.

Total outgoing vessels.

The total outgoing vessels being—

Class.	Number.	Number of Crew, Passengers and Pilgrims.
Square-rigged and steamers	163	16,309
Native craft	74	1,613
Pilgrim ships	9	7,390
Total ...	246	25,312

On only one occasion was infectious disease discovered on board in the case of a pilgrim ship in which several children were found to be suffering from measles. They were at once removed to the shore and the vessel sailed after thorough fumigation and disinfection, the fact being noted on the Bill of Health.

In-coming vessels.

243. As regards in-coming vessels. All vessels entering the port with suspicious cases of disease on board are compelled to hoist the yellow or R. flag by day and two lighted lanterns one over the other by night. The fact is telegraphed by the signal tindal at the Light-house to the Port Health Officer who boards them and acts according to the Inspection Rules contained in Appendix A.— Government of India Resolution No. 3-95—700, dated 9th May 1879.

The following table enumerates such vessels and shows the number of cases of infectious disease on board. It also includes Her Majesty's troopships which it is customary to visit on their arrival. It also shows that some of the vessels flew the yellow flag under misapprehension of the nature of the disease :—

No.	Name of Vessels.	From what Port.	No. of Individuals comprising Crews.	No. of Passengers.	No. of Cases of infectious Disease.	Nature of Disease.
1	S. S. "Bangalore"... ...	Penang ...	75	3	None ...	S. C. Fever.
2	H. M.'s Ship "Malabar" ...	Port Said .	264	1 173	Do. ...	None.
3	Do. "Crocodile" .		263	1'301	Do. ...	Do.
4	Do. "Serapis" ...		263	1'395	Do. ...	Do.
5	S. S. "Columbian" ...	Jeddah ...	72	1'046	5	Small-pox.
6	H. M.'s Ship "Jumna" ...	Port Said ...	263	1'457	15	Measles.
7	S. S. "Orion"	Aden ...	60	41	1	Small-pox.
8	S. S. "Kerbela"	Karáchi ...	80	214	None ...	Bronchitis.
9	S. S. "Anger Head" ...	Jeddah ...	29	842	Do. ...	None.
10	S. S. "Vorwarts		59	565	1	Small-pox.
11	H. M.'s Ship "Malabar" ...	Portsmouth .	257	1,326	None ...	None.
		Grand Total ...	1,685	9,363		

Small-pox on board S. S. *Columbian.*

The only case in which it was found necessary to keep a vessel at the quarantine anchorage was on the arrival of the S.S. *Columbian* on the 28th October from Jeddah with 1,046 pilgrims on board, 5 of whom were suffering from small-pox. Under instructions from Government when the pilgrims requiring vaccination had been vaccinated pratique was given and the ship was disinfected, fumigated, and repainted.

In all other cases pratique was given almost immediately and the persons suffering were removed to an hospital ashore.

Country Craft.

244. The number of country craft arriving from Foreign Ports was as follows :—

From what Port.	Number of Vessels.	Number of Individuals comprising Crews.	Number of Passengers.	Total Crews and Passengers.
Persian Gulf Ports	121	2,581	237	2,818
Other Foreign Ports	48	987	92	1,079
Grand Total ...	169	3,568	329	3,897

No case of infectious disease was discovered on board any of the native craft.

Sickness and deaths on board pilgrim ships.

Dr. MacCartie appends a table showing the number of persons sick and the number of deaths and ratio of deaths per cent. to strength which occurred on board pilgrim ships returning from Jeddah in October, November and December :—

No.	Vessel's Name.	Date of Arrival in Bombay.	Number of Pilgrims.	Number of Deaths.	Number of Admissions into Hospital.	Ratio of Deaths per cent.
1	S. S. "Columbian"	October 28th ...	1046	9	39	·86
2	S. S. "Anger Head"	November 1st ...	403	4	78	·99
3	S. S. "Abyssinia"	" 1st ...	175	1	10	·57
4	S. S. "Adria"	" 4th ...	286	5	19	1·7
5	S. S. "Orion"	" 8th ...	28	Nil.	Nil.	Nil.
6	S. S. "Vorwarts"	December 10th ...	548	3	Nil.	·54
7	S. S. "Anger Head"	" 11th ...	820	3	62	·37
8	S. S. "Columbian"	" 13th ...	1,046	8	32	·76
9	S. S. "Shah Jehan"	" 17th ...	49	Nil.	Nil.	Nil.
10	S. S. "City of Manchester" ...	" 18th ...	901	8	63	·89

Cholera among harbour population.

245. The following table shows the number of cases of cholera among the harbour population during each month of the year :—

Month.	Number of Cases.	Deaths.	Recoveries.
1. January	17	17	...
2. February	...	...	...
3. March	1	1	...
4. April	1	1	...
5. May...	2	2	...
6. June...	6	5	1
7. July...	1	1	...
8. August	1	1	...
9. September	4	3	1
10. October	1	...	1
11. November	17	12	5
12. December	...	...	...
Total ...	51	43	8

High percentage of deaths to attacks due to the long distances from the harbour to the J. J. Hospital.

The first point which attracts attention is the large number of cases in the months of January and November. And the next is that the percentage, (84), of deaths to attacks is very excessive. This in my opinion results from the very long distances persons suffering from cholera have to be carried before they can reach the J.J. hospital and points to the necessity for there being a floating sanitarium for the treatment of such persons. For these reasons I recommended that as the "Czarewitch," Indian Government troopship, was for sale and as no buyers could be found for her she should be converted into a sanitarium for the use of the harbour population, but Government decided that this proposal could not be entertained on account of the great expense attending it as the cost of the vessel would represent a very large sum, the alterations necessary to render her suitable for such a purpose would involve a heavy outlay, and the maintenance of the requisite establishment would be expensive.

Most of these cases occurred at the Carnac and Masjid Bunders.

246. The disease was confined to the crews of prows, and tonies and in no instance had any of the attacked persons recently arrived in Bombay. With few exceptions the cases occurred in boats lying in the neighbourhood of the Carnac and Masjid Bandars. Some difficulty was experienced in November in deciding how to deal with the prows loading or unloading cargoes at the different bandars or alongside vessels in the stream. In all cases the boats were disinfected and removed outside the shipping in the harbour and the cargo was fumigated by the Water Police.

Insanitary condition of foreshore.

247. In answer to a question from the Health Officer regarding this outbreak I pointed out that in my opinion the sanitary condition of the bandars and foreshore was of paramount importance, and I called on him for a report on their actual condition. He submitted a very careful report which gave conclusive evidence that the foreshore of the harbour was in a most insanitary condition. In forwarding this report to Government I pointed out that Dr. Davidson, the Acting Health Officer of Bombay, in his report for the 4th quarter of 1883, had remarked that "a large number of people were attacked with cholera at or near the various bandars, and I would take this opportunity of drawing attention to the dirty condition of a number of the basins from Mody Bay to Mázagaon. The Municipal Commissioner informed me that these places being technically outside the Island of Bombay I have no power to interfere. I considered it my duty, however, to bring the matter to the notice of the Port Trust and regret that nothing has been done."

Measures recommended.

I recommended that the Port Trustees be invited to provide latrines with sufficient accommodation for the crowds of natives who frequent the various bandars and that the bottom of each basin be dredged and the mud be removed from it whilst effective measures should be taken to prevent persons visiting these basins or any part of the foreshore for the purpose of relieving the calls of nature.

Sanitary condition of ships infinitely more important than medical inspection of crew and passengers.

248. Government having been pleased to decide that the duties of the Health Officer of the Port should be limited to a medical inspection of the officers, crews and passengers of outgoing vessels, I felt it to be my duty as Sanitary Commissioner to respectfully bring to notice my opinion that from a sanitary point of view it was of infinitely more importance that an examination should be made into the sanitary condition of every vessel leaving the harbour. I pointed out that the real localizing causes of epidemics may exist as intensely on board dirty unhealthy ships as they do in the dirty lanes of the City of Bombay, and that it was not safe to trust to merely a medical inspection of the persons on board unless the condition of the ship was also satisfactory.

Dr. Southwood Smith's remarks.

249. In making this recommendation I was guided by all sanitary experience. Dr. Southwood Smith, one of the most eminent sanitary authorities who ever lived, says:—

"The sanitary regulation of the ships themselves—a measure of the utmost importance to the seafaring classes of the community—would accomplish far more than could be hoped for or pretended to be accomplished by any known system of quarantine and would have moreover a beneficent effect upon popular opinion by removing the fallacious appearances which favour the belief in imported disease, while they divert attention from the true causes of disease, the removeable and preventible causes that exist on the spot."

Probability of disease breaking out on board of a dirty ship.

250. I feel sure that some day or other disease will break out on board of a dirty ship which has left Bombay with a clean Bill of Health and with a certificate signed by the Health Officer of the Port to the effect that the crew and passengers are free from infectious or epidemic disease dangerous to life.

If this ever happens, foreign nations will discover that the measures taken in Bombay are what I must describe as of but little sanitary value, and they will, I fear, be led to impose yet more stringent restrictions on our commerce.

Opinion of the Sanitary Commissioner with the Government of India.

251. I was supported in my opinion by a memorandum which was forwarded to me by the Sanitary Commissioner with the Government of India who stated :—

"If in addition to inspecting the passengers and crew the Health Officer of the Port were also to inspect the sanitary condition of the vessel, he would be doing a most important work from which excellent results would flow. The health of her passengers and crew is dependent chiefly on the condition of the ship itself. If that condition be good then the chances of illness on board will be largely reduced and in this point of view, totally apart from all other benefits, there would be less risk of interference from quarantine and other officials at the ports of arrival. A sanitary inspection of vessels may perhaps appear to be a measure which ship-owners would resent and which masters and agents would find most irksome, but if conducted on proper principles all opposition on this score would soon disappear, and all concerned would realize the very great benefit obtained. As it now stands the Port Health Officer is diverted from the real sanitary work to be done, and employed on a merely fanciful duty which unfortunately cannot be set aside in the present state of prejudice, but which is a mere nothing in point of importance when compared with the real sanitary work that needs doing."

Present law does not provide for Sanitary examination of ships.

252. Government however pointed out that it is useless to order a sanitary examination of ships if the law gives to the examining officer no power to enforce his views, and said "this is one of several objections to Dr. Hewlett's recommendation, but it is in itself conclusive."

I am not aware what the objections Government alludes to are, but I would most respectfully hope that if they are not insuperable, the law may be altered. The Merchant Shipping Act, No. I. of 1859, as amended by Act V. of 1883 gives the Health Officer of the Port power to inspect provisions and water and I believe the accommodation provided for the seamen, but he has no power to examine into such important matters as the state of the bilge, the condition and sufficiency of the water-closets, the ventilation of the lower decks, and general cleanliness of the ship.

I would respectfully submit that if it is right in cities that Health Officers should inspect the sanitary condition of houses and prevent nuisances, surely it is right that similar action should be taken on board ships which are only floating domiciles.

Many years ago I consulted one of the chief sanitary authorities in England on this subject, and his advice was—

"Let the port authorities exercise towards all outgoing ships the same jurisdiction that the municipal authorities exercise in regard to houses in towns.

"Let them afford facilities to Captains at the owner's expense for effecting every necessary cleansing, purifying of cargoes, medical treatment of sick, washing and cleansing of all foul clothing, bedding, &c. A procedure such as this could always, and ought always to be in operation, irrespective of times and epidemic seasons. The only loss from it would fall on dirty incapable Captains and their employers, and the great injustice of taxing all alike, good and bad, would be avoided. It would make private interest the guardian of health on board ship, and would introduce a really efficient system of protecting passengers, crews and ports from danger."

Appointment of Consulting Sanitary Engineer for the Presidency.

253. I must also record as likely to exert a most important influence on the sanitary condition of the Presidency the appointment of a Consulting Sanitary Engineer for the Presidency of Bombay. As far back as 1876 I had, whilst acting as Sanitary Commissioner, represented to Government the great need of such an officer, and in July I brought the subject again forward; for as head of the Sanitary Department I was constantly feeling that I was called upon to report on schemes which demanded the knowledge of an expert. Moreover however tardily, sanitary measures are engaging the attention of Municipalities throughout the Presidency and I am very desirous that especially as regards structural works of sewerage and drainage no mistakes should be made, for if they are, discredit will be brought upon the water carriage system and pipe sewers which would be a great discouragement to those interested in sanitary reform in India.

Sanitary Engineering a speciality.

254. It is not reasonable to suppose that every district engineer, however able and efficient he may be in his own branch of engineering, is qualified to undertake the design of especial sanitary works. Sanitary engineering is as much a speciality and as distinct a branch of engineering as obstetric or ophthalmic surgery are in curative medicine or surgery.

Engineers too in India have hitherto had no opportunity of studying or practising sanitary engineering on a large scale and consequently are not as a rule qualified to deal satisfactorily with the subject. Mistakes which I can only term hideous have been made in past years. I need only refer for example to the arrangements originally designed and carried out for the disposal of nightsoil and bathing water from Government House, Ganesh Khind, to show the necessity of having some officer to refer to, who has made sanitary engineering his special study. I accordingly submitted to Government the name of Lieutenant-Colonel Ducat, R.E., as an officer who had specially studied the subject in England and whose report on the drainage of Poona had received the highest commendation from Sir Robert Rawlinson.

Appointment of Colonel Ducat, R.E.

255. Government in sanctioning my proposal was pleased to say that my suggestion was only reasonable and proper, and pointed out that when the Sanitary Commission for Bombay was first formed in 1864 it consisted of a President, 3 Members and a Secretary. One of the members was an Engineer who in addition to his other duties acted as professional adviser to the President and on that account received a special allowance of Rs. 300 per mensem.

His Excellency the Governor in Council proposed with the sanction of the Government of India to inform Municipalities that Government will be prepared to place at their disposal the services of Lieutenant-Colonel Ducat, an officer specially qualified to advise in such matters on the Municipality paying during the period for which he is employed his salary with the prescribed contribution on account of his pension and leave allowances and such deputation allowance not exceeding Rs. 10 per day as Government may see fit to fix.

The Government of India was pleased to sanction the above proposal, and Government in its Resolution, General Department, No. 3952, dated 30th October, appointed Colonel Ducat Consulting Sanitary Engineer for the Presidency of Bombay.

Great assistance afforded by Colonel Ducat.

256. I have already derived the greatest assistance from Colonel Ducat. Plans for the drainage of the new buildings at Elphinstone College, at the European General Hospital and in the Marine Lines have been submitted to him and he has corrected mistakes in them.

Municipalities which have applied for his services.

I am also very glad to be able to record that the Municipalities of Ahmedabad and Hyderabad in Sind have applied to Government for his services. The former in connection with water-supply and sewerage and the latter city which has a good water-supply, for a sewerage scheme.

Need for sanitary engineering work at Surat, Ahmednagar, Násik, Pandharpur.

257. I am confident that as time goes on other Municipalities will follow this good example. Ahmednagar and Surat require structural works to make them healthy, and I would hope that Government will, under the power reserved to itself in the District Municipal Act, insist on Násik and Pandharpur, which are the two places principally visited by pilgrims in the Bombay Presidency, providing themselves with a pure water-supply and a good sewerage scheme.

Cholera Hospital for Natives in the Fort.

258. Among other sanitary topics a discussion has taken place regarding the location of a cholera hospital for natives living in the Fort on a site selected by the Municipal Commissioner on the confines of the compound of the European General Hospital, which met with the approval of Surgeon-Major Blanc, the Surgeon of the Hospital, and myself, as Sanitary Commissioner, but which, after it had been sanctioned by Government, was objected to by Surgeon General Beatty "as a project clearly fraught with danger and risk to life, which if carried out would probably terminate in calamitous results."

Experience of the past.

259. The experience of the past is, as pointed out by Government, in favour of the view entertained by Dr. Blanc and myself. During the 4 years, 1880—1883, 325 persons suffering from cholera were treated in the cholera ward of the Sir Jamsetji Jijibhái Hospital, but during the same period only two patients suffering from other diseases who were inmates of the general wards of that institution were attacked with cholera. In the 5 years, 1879—1883, 225 cases of cholera were admitted into the Gokuldás Tejpál Hospital, but only three persons in the general wards, of whom two were suffering from complaints other than cholera and one was a Hospital servant, were attacked with cholera whilst in the Hospital.

The opinion of Government.

260. Government considered that these facts sufficiently refuted Dr. Beatty's contention that the existence of a cholera hospital in the vicinity of the European General Hospital is likely to be attended with disastrous consequences to the patients in the latter institution and tended to show that the fears expressed by him had no solid foundation.

Groundless apprehensions regarding the contagiousness of cholera.

261. As however many unprofessional persons who have not of course had the opportunity of studying the real facts of the question appeared to share the view expressed by Surgeon General Beatty, it may perhaps be as well to adduce further evidence to prove how utterly groundless any such apprehensions are.

Site of proposed Hospital.

262. It should be remembered that the site selected was further removed from the Hospital than the present cholera ward from which the disease has never spread to the inmates of the main building.

Dr. Southwood Smith on contagion.

263. Dr. Southwood Smith, "The Father of Sanitary Reform" states:—

"The evidence that has been adduced of the narrowness of the sphere even of the most virulent contagion shows the groundlessness of the alarm sometimes entertained, whilst it points to the certain means of destroying it. The London Fever Hospital is separated from the Small-pox Hospital only by the space of between thirty and forty feet, and the windows of the wards of both establishments are immediately opposite each other, yet there is no instance of the communication of small-pox to the typhus patients, nor of typhus to the small-pox patients, nor of either disease to the convalescent or to the official inmates of the adjoining establishment. There does not appear to be a single instance on record in any country of the extension of infection beyond the walls of an hospital or even of a lazar house so as to injure in any manner the nearest inhabitants."

Extract from Dr. Hutcheson's pamphlet on cholera.

But the following extract from a pamphlet on Cholera by Surgeon-Major Hutcheson offers the most convincing evidence that can possibly be afforded.

"The non-contagiousness of cholera is evidenced in a great degree by the experience of the Calcutta General Hospital where during a period of 13 years only 8 men out of a total of 24,000 Europeans after being admitted with some other complaint were attacked with cholera; and as seven of these were admitted with diarrhœa or bowel-complaint, which

may have been cholera in its earliest stage, there was thus only 1 in 24,000 actually stricken with cholera, while in hospital and among the 24,000, there were 1,100 admissions for cholera. The remarkable immunity of patients treated in the same ward with men suffering from cholera—and this too in the experience of an extensive hospital—would amply justify the view, otherwise supported by facts of the non-contagiousness of cholera."

Additional evidence.

I learn from a medical friend in Calcutta :—

"That up to the present time there is no cholera hospital in Calcutta. Cholera patients are treated in the general hospitals, generally now-a-days in special wards but in wards communicating freely with those devoted to other forms of disease. Neither now nor in the old days when they were treated in the ordinary wards has there ever been the slightest evidence to show that they are or were capable of serving as a source for the spread of the disease. The old habit of treating them in common wards was objectionable, as cholera patients possibly are alarming and certainly are offensive to other inmates of the same ward."

Surgeon-General Beatty's theory not supported by facts.

264. I think the above extracts contain a complete refutation of Dr. Beatty's *theory* as they show that *in point of fact* absolutely no danger has resulted from treating cholera patients in the same ward with persons suffering from other diseases. In the case of Bombay it was not proposed to admit cholera patients even into the same building but a building was to be provided which was to be separated by a large space intervening between it and the main hospital. There is however still further evidence to prove the non-contagion of cholera which I shall now proceed to show.

Surgeon-General Cuningham's new work on cholera.

265. Surgeon General Cuningham, who, from his unequalled experience extending over a period of 20 years as Sanitary Commissioner with the Government of India, speaks with an authority which cannot be gainsaid, has most opportunely since the date of this discussion published a most valuable contribution to the literature of cholera which sets forth all the facts regarding the disease which have been ascertained up to the present time in and out of India, and in which the current theories on the subject are examined in the light of the facts.

His statements.

266. Every one who has read this book must allow the great fairness with which he states his case, and it now remains for those who believe in the specific contagion of cholera to show that his statements are not facts.

Former evidence regarding the non-contagiousness of cholera.

267. His deductions regarding the non-contagion of cholera are by no means new. As long ago as 1848 the reports of the Metropolitan Sanitary Commission gave exhaustive evidence in support of this fact.

"I have never observed" says Dr. Parkes "any indication of contagion. In common with the great majority of Indian writers my evidence is on the negative side. When cholera prevailed for some months in Tenasserim and traversed indeed the whole of Eastern Asia, I never heard human intercourse alleged as a means of introduction into any place. The Burmese and Tailiens never considered it contagious, and showed no wish to avoid their relatives when sick or to omit the customary ceremonies over them when dead. For months, as already said, the disease was raging in one particular part of Moulmein; intercourse between this and other portions was certainly not in the least interrupted on that account, and yet there was no corresponding extension of the disease.

"No precautions were taken to prevent the European soldiers from going into the bázár; yet they were not attacked till nine months after its first appearance in the town. The sepoys of the native regiments mixed still more freely with the natives and yet they were untouched throughout.

"During the epidemic attacks in 1843 and 1845 among the Europeans there was a large extra allowance of hospital servants and coolies; these men were constantly in the cholera ward, aiding the sick men in and out of bed, putting them into baths, rubbing their cramped limbs, emptying the close stools, and performing all the offices demanded by the patients, usually so restless and fretful in the earlier period; and yet not one of these nor any of the hospital servants were attacked. The Medical Officers were constantly on duty, receiving and inspecting the sick, examining the dead bodies, &c., and yet enjoyed the same immunity. In the *post mortem* examinations of cholera patients I have accidentally inoculated myself many times without ill effects.

"So also in the gaol hospital none of the medical men nor the attendants were attacked. When I was engaged in the *post mortem* examinations in the gaol, I employed several

Hindus to assist me, and we spent many hours every day in a temporary shed we used as a dead-house and yet no one ever thought of any danger from contagion.

"In fact I may sum up my own knowledge in the assertion that I have personally never witnessed in India any facts which would have led me to believe that the poison of cholera possessed the character of contagious virus, namely, the power of multiplying itself by its action on the living human system."

Facts in India regarding cholera.

268. Other evidence equally strong, although too long to be brought forward here, is adduced in this report, but Dr. Cuningham shows that the facts which were observed in 1848 still hold good.

For example, he says :

"Since 1877 a record has been kept of the number of attendants on cholera cases treated in Military and Jail Hospitals throughout India, and the number of these that have themselves been attacked. The body of evidence then accumulated stands thus :—

Number of cases of cholera concerned	5,696
Number of attendants on these cases	10,599
Number of these attendants themselves attacked ...	201
Percentage of attendants attacked	1·9

Opinion of Army Sanitary Commission.

269. The Army Sanitary Commission observe: "So very subordinate is the spread of cholera by infection that after experience on the largest scale conducted on the persons of attendants on cholera cases even in cholera-affected localities we have been compelled to state that a well appointed cholera hospital is about the safest place to be in during an epidemic of cholera."

Dr. Hutcheson's evidence.

270. The same fact was observed in England as will be seen from the following extract from Dr. Hutcheson's pamphlet.

"The same remarkable immunity was noted in London hospitals during the epidemic of 1866. Out of 258 nurses and attendants, only one death is registered; and there was no case of cholera among the large medical staff of these institutions where only two deaths from cholera amongst regular patients were registered during the epidemic, although the average number of patients (ordinary) stood at 1,266."

Care of cholera patients not attended with risk.

271. Of course if the hospital comes within the epidemic influence of the cholera-producing cause attendants are equally with other persons liable to attack, but there is the most abundant proof and the fact cannot be too widely known that "cholera is not contagious in any sense of the term and that the immediate care of a patient sick of cholera may be undertaken without the slightest risk." Hutcheson.

Immunity among sweepers and Dhobis.

272. Those who believe in the specific contagion of cholera consider that the germs of the disease are contained in the dejecta. It is however a note-worthy fact that sweepers who handle these discharges and Dhobis who wash the clothes worn by the patients are in no way more susceptible to the disease than other persons. The same immunity was noticed among washerwomen in England during the cholera epidemic of 1866.

Among the labourers of the Public Health Department.

273. There is another very good proof of the non-contagion of cholera in the fact that whilst during the last 20 years no death from cholera has taken place in the City of Bombay without an especial enquiry having been held and measures having been taken by the members of the Public Health Department, yet a death from cholera amongst the labourers is of the very rarest occurrence, and no one has been known to have contracted the disease whilst engaged in disinfecting rooms, &c., which had been occupied by persons suffering from cholera.

Cholera certainly not contagious.

274. We are then able to assert with the utmost confidence that cholera is not a contagious disease, but it must be frankly admitted that the laws which govern its propagation are still obscure and that we know absolutely nothing definite as to the nature of its producing cause.

275. A most popular theory is that the extension of the disease is due to its portability from an affected district by travellers and that by human intercourse alone is its propagation over vast areas to be accounted for, but this theory is, as Dr. Cuningham shows, not tenable when the facts of the great cholera epidemics in India are closely investigated. For example, the districts in Bengal which suffer most are not those in most constant communication with the endemic area and the improved means of communication of recent times have not altered the direction or frequency of epidemics or the rate at which they travel.

Theory of spread by human intercourse not borne out by facts in Bengal.

276. The experience in Bombay fully bears out this view. I could cite very many instances where the disease has been raging in a locality whilst it has not spread to contiguous places although there was daily communication between them. For example, in 1881 cholera was raging in Lahore and fears were expressed that it would be introduced into Sind and pass up the Bolan to Quetta. Measures were accordingly taken to watch the travellers arriving at Rohri by train, but although there was daily communication between the two places the disease did not come and no death from cholera took place in Sind during that year. The history of cholera in the annual reports of the Sanitary Commissioner affords the strongest evidence of the localization of the disease for we find each year that even though it may be very prevalent in a district yet only a very small proportion of the total villages are attacked, whilst among those in which there is no cholera are many which are contiguous to those attacked.

Or in Bombay.

277. It would be well if those who believe in the theory of human intercourse would study the literature of the disease and see for themselves how utterly the theory breaks down when examined in the light of the facts. Dr. William Fergusson in speaking of yellow fever says in language which may well be applied to cholera:

Places not persons.

"Places not persons constitute the rule of its existence. Places not persons comprehend the whole history, the etiology of the disease."

The accumulated evidence of the last 40 years proves that *cholera in India is due under special conditions to local causes, and to local causes alone.*

Cholera due to local causes.

278. The belief in the importation theory by European Continental Governments and their superstitious dread of a danger which exists only in their own imagination has imposed on the commerce of India an enormous loss of money and occasions the inconvenience and worry of quarantine to which they in vain trust to protect themselves from the consequences of the utter neglect of cleanliness in their large cities and towns. Dr. Cuningham shows that cholera has been known in other countries from the earliest times and that isolated cases occur every year in all countries more or less; that ships do not carry cholera from India to other countries, whilst those countries which are in most direct and constant communication with India have suffered least. If it were true that cholera was carried by ships from India to the Red Sea, Egypt and Europe, *viâ* the Canal, we should at least expect the converse to hold good and that the disease would be brought from countries where it was prevailing into India: but what are the facts? The Commissioner of Customs has been good enough to search the records in his office for the last 20 years and during that period there is no record of any case of cholera ever having been landed from the Red Sea and yet we know there have been several epidemics of cholera in the Hedjaz during that period.

Importation theory leads to imposition of quarantine.

Cholera never imported from Sea into Bombay.

279. Dr. Cuningham suggests that the cholera-producing cause is not an entity at all, but some unknown force. This may or may not be the case. It is impossible to decide in the present imperfect state of our knowledge, but there can be no doubt about the truth of his contention that an epidemic influence is necessary and that atmospheric conditions have a most important bearing on the disease.

Dr. Cuningham's opinion regarding the cholera producing cause.

Epidemic atmosphere.

280. Dr. Southwood Smith says: "Besides the contamination of the air by external causes it is conceived that the atmosphere itself undergoes natural changes which predispose it to the development and spread of epidemics. It is quite certain that such epidemic changes do take place and prepare the way to pestilence. We now know definitely something of an epidemic atmosphere and the information obtained is most significant, for it shows that the several meteorological changes that take place during the prevalence of an epidemic concur to produce a heavy, warm moist and stagnant atmosphere with disturbed electricity—conditions highly favourable to the decomposition of organic matter. Under the influence of such an atmosphere over the moist and warmed surface of every filthy place, over the entire mass of all accumulations of filth in streets, lanes and courts and within and about houses, and over the heated surface of all foul water decomposition goes on with the utmost activity and the products are poured into the stagnant air."

Seasonal prevalence.

281. The seasonal prevalence of cholera in the Bombay Presidency has been shown in another portion of the report, and it is found that the disease increases in intensity in a very marked way, month by month, until the maximum mortality takes place in July, when it begins to abate and falls in regular gradation until December when the minimum mortality for the year is met.

The months in which in the Presidency of Bombay it prevails with greatest virulence are May, June, July and August.

The triennial epidemic intensity was noticed by Mr. Lumsdaine, and our records bear testimony to the accuracy of his observation.

English cholera Commissioners researches.

282. The researches of the English Cholera Commissioners—Drs. Klein and Heneage Gibbes—during the year have apparently utterly disproved Dr. Koch's theory that his far-famed comma bacillus has any causal relation to cholera and they have also shown that this bacillus is not peculiar to cholera but is found in other cases as well. Drs. Lewis and Douglas Cuningham have long ago shown that similar organisms are merely epiphenomena.

Water theory.

283. Regarding the water contamination theory the Army Sanitary Commission says: "There is no proof that impure water has exercised any specific influence on the production or propagation of cholera in India, although in India as elsewhere water containing animalized matter in a state of putrescence whether proceeding from healthy or choleraic discharges may act as a predisposing condition when cholera is present in a locality. Existing putrescence appears to be the element required, and not any supposed specific poison; hence impure water-sources might be innocuous if the decomposition of organic matter were complete and only nitrates remained but almost poisonous if drunk while putrescence was in progress."

Pure water-supply first line of defence.

284. It was for this reason I recommended in the cholera instructions that the dejecta should be burnt as they consist of organic matter which very speedily passes into a state of putrescence, and if while in this state they find their way into a source of drinking water-supply they may render it poisonous. As I said last year I look upon a pure water-supply as the *first line* of defence against cholera and other diseases; but as Dr. Cuningham rightly points out a pure water-supply although a great sanitary improvement is not *solely* to be relied upon to the exclusion of other sanitary improvements.

Cholera a fever.

285. It appears to me that writers sometimes forget that cholera is essentially a fever "which appears in its true character when the first stroke of the disease does not prove fatal and time is allowed for the full development of its successive stages".—Southwood Smith.

Cholera and malaria.

285A. In my opinion cholera will in time be recognized as an intensified form of the malarial fevers common to the country. Medical authorities say it is almost impossible

to diagnose between it and pernicious intermittent fever and the symptoms described in the latter are similar to those seen in cholera. Drs. Lewis and Cuningham although they do not admit that the causes productive of cholera and malarial fevers are identical, yet point out the marked parallelism which exists between these diseases.

Dr. Bryden's views.

Stations in which death-rate from cholera is high, the death-rate from enteric and other fevers also high.

286. Dr. Bryden describes cholera as "a moisture loving miasm" which is allied in its course to malaria and that like malaria if transported by winds from the place of its origin it cannot reproduce itself but must become extinct after a specified time unless renewed in the same way. From Dr. Stephen's tables for 1870—1879 I find in those stations in which British troops under the Bombay command are quartered where the death-rate from cholera is high that the rate for enteric fever and other fevers is also high :—

Station.	Deaths per 1,000 of strength.		
	Cholera.	Enteric Fever.	Other Fevers.
Neemuch	12·91	3·75	2·11
Indore...	8·54	1·07	3·20
Ahmedabad	4·39	4·02	2·93
Nasirabad	2·04	4·24	2·67
Poona and Kirkee...	1·91	1·05	·67

Organic matter in soil.

287. I cannot but believe that the putrescence of organic matter in the soil under certain climatic conditions creates a condition favourable to the origin and spread of cholera and other fevers. The immunity which has so often been observed in Sind and Mooltan can only in my opinion be accounted for by the light annual rainfall and the extremely dry atmosphere which desiccates the organic matter in the soil.

Predisposing causes.

288. Dr. Cuningham points out that fatigue, religious excitement, want of food, clothing and shelter, sorrow, anxiety and pre-eminently fear, are all, and especially if combined depressing influences which exhaust the vital powers and therefore must be considered as predisposing causes of cholera. Injudicious diet in the shape of unripe or overripe fruit, especially mangoes, melons, cucumbers and the like, predisposes to attack during epidemic seasons as also does the taking of aperient medicines especially of saline purgatives.

Filth chief factor in producing cholera.

289. There can be no doubt that one of the chief factors in producing cholera is filth in and around inhabited areas.

Filth under ordinary circumstances does not produce cholera, for we have at all times filth everywhere throughout India yet we do not always have cholera, but when the filth is brought under particular but as yet unascertained climatic or other influences or when it has undergone certain unknown changes it becomes intensely poisonous.

Sanitary improvements universally recognised as the only sure preventive and early removal from affected locality recommended.

290. Discussion regarding the exact nature of what these influences or changes are would in our present state of knowledge be unprofitable, as it must end in conjecture; but it is most satisfactory to notice that however ignorant we may be of the exact nature of the cholera-producing cause and however divergent the opinions of experts may be as to what it really is, yet whether they believe in a specific contagion, or not, all authorities are unanimous in agreeing that the only means of prevention consist in sanitary improvements, and if an outbreak occurs the only safety is to be found in early removal from the affected locality.

291. "Sanitary improvements" says Dr. Cuningham "to prevent cholera and movement if an outbreak unmistakeably threatens, are the true and only safeguards as shown by all Indian experience—Pure air, pure water, pure soil, good and sufficient food, proper clothing, and suitable healthy employment for both mind and body—these are the great requisites for resisting the cause or combination of causes which produce cholera."

The diminished death-rate among prisoners and British troops testify to the value of sanitary improvements.

292. He shows how sanitary improvements have diminished cholera among troops and prisoners during the last 23 years.

The average annual death-rate from cholera among prisoners in the Bengal Presidency was during the period—

1854 to 1867	10·77
1868 to 1876	3·28
1877 to 1883	3·61

In the 3 Presidencies among European troops the results were still more striking and stand thus :—

Presidency.	Annual Average Death-rate from Cholera.		
	1860—1869.	1870—1879.	1880—1883.
Bengal	9·24	4·18	2·49
Madras	2·56	1·68	0·90
Bombay	4·80	1·53	0·45

The only way to prevent epidemics.

293. The only way of preventing the origin and spread of cholera and other epidemic fevers is the adoption of sanitary measures with the view of removing *local causes* of disease.

The condition of our villages and towns has over and over again been brought to light, but nothing or next to nothing has been done to improve them, and the great waste of human life and the misery which is its consequence go on year after year without any effective remedial measures having up to this time been taken to prevent them.

Simple cleanliness required.

294. A Bill for promoting sanitation in villages is, I believe, shortly to be brought before the Legislative Council, and I trust that its provisions will provide for the removal of the causes of epidemic diseases which are perfectly well known and capable of prevention. For example, the accumulation of filth in villages and towns might be prevented, the cleaning of the surface might be insisted upon, the prickly pear might be cut down, the protection of the water-sources might be carried out, the regulation of places of natural resort might be ensured. *Simple Cleanliness* is what is required, and until this is enforced it is not possible to prevent epidemics. Has not the time arrived when Government in the interests of the people of India and of our commerce with Europe may rightly insist on measures to ensure cleanliness being taken throughout the Presidency?

Premonitory diarrhœa in cholera.

295. As regards cholera, moreover, it should never be forgotten and indeed cannot be too strongly urged upon every one that in times when the disease is in movement there is usually, although not always, a period in which a premonitory diarrhœal tendency is observed throughout an affected community. I took occasion to bring this matter to the notice of Government during the year, and I pointed out that unless the premonitory diarrhœa is checked the disease may, when the cholera producing cause becomes more intense, develop into cholera and many lives in each cholera outbreak are lost because nature's warning has not been attended to in time.

296. I regard it as of the highest importance that greater facilities than have up to this time existed should be placed at the command of villagers with the object of their being able to obtain medicine to check this premonitory diarrhœa, and I urged the desirability of keeping with the pátil of every village medicine for the purpose of checking diarrhœa in its earliest stage during such times as cholera is known to be in movement and approaching the district in which such village is situated.

Greater facilities for villagers to obtain medicine.

297. Government, however, considered it barely practicable to keep a supply of cholera medicine in every village and that it will suffice if in tálukas where outbreaks of cholera are of frequent occurrence a supply of cholera mixture which should not be less than 6 bottles be maintained at the head-quarter town, and a supply of not less than two bottles be kept at each police station. The pátils of villages are directed to report to the nearest police station whenever cholera appears in their village or diarrhœa becomes prevalent. When such report is made the officer in charge of the police station is ordered to give cholera mixture to the pátil with directions for its use and to apply for a fresh supply.

Present orders of Government.

298. I very much fear the orders as they stand will not effect the purpose desired as unless medicine is given *immediately the diarrhœa sets in*—at which period it can be easily checked – it will develop into cholera. The time which will be lost in fetching the medicine from the nearest police station will I fear be fatal, and in addition to the preventible loss of life great discredit will be brought on the English method of treatment which if it had been possible to have been carried out on the spot would have been found to inspire confidence by the success by which it would have been accompanied.

Medicine to be of use should be given immediately.

299. In connection with this subject I may mention that during the year I tried to get dilute sulphuric acid substituted for the cholera mixture now distributed. I in common with many district officers believe that the cholera mixture with opium in the hands of ignorant persons is not devoid of danger. We know that the secretions in cholera are alkaline and the exhibition of dilute sulphuric acid in the diarrhœa preceding cholera has often been attended with the best results.

The use of dilute sulphuric acid recommended.

300. The Surgeon General to whom Government referred my suggestion was however opposed to any change in the composition of the cholera mixture as at present distributed.

Dr. Hutcheson's remarks on the value of dilute sulphuric acid.

I was very glad therefore to read, in Dr. Hutcheson's pamphlet, the following remarks :—

"In almost all instances," he says, "cholera in its earlier stages can be arrested by the free use as a prophylactic of dilute sulphuric acid which is everywhere procurable at almost nominal cost even in remote districts.

"In India where the majority of the population suffers from chronic malaria a very small dose of an antiperiodic, such as quinine or cinchona febrifuge, renders the action of the acid more efficacious and *vice versâ* the chemical action of the acid renders the assimilation of the acid and antiperiodic more rapid and complete.

"There is thus in the hands of the Indian Government an admirable and cheap prophylactic against cholera. This prophylactic can be readily rendered available in all endemic areas and it is beyond doubt that its general use would result in a greatly lessened mortality throughout India."

301. The report submitted by the Factory Commission during the year must be noticed as embodying measures which, if sanctioned by the Government of India, cannot fail to exercise a very beneficial effect on the health of the large number of persons employed in the mills, &c., throughout the Presidency and especially in the City of Bombay.

Factory Commission Report.

These measures contemplate improvements being effected in the construction of all new mills which it is recommended should only be permitted to be erected

according to a standard plan. They provide means for improving the ventilation and for ensuring the effectual removal of impurities suspended in the air as well as for the maintenance of cleanliness.

The Commission recommended that the age at which children should be employed should be raised from 7 (as at present) to 9 years and that children should not work for more than 9 hours out of the 24, and that all persons under the age of 14 should be considered children.

Women and children employed in factories should be granted 4 days' holidays in each month and no child should be employed in a factory unless he or she can produce a certificate signed by a Certifying Surgeon to the effect that the applicant is of the prescribed age and is physically fit.

Tánsa Reservoir.

302. In the City of Bombay the most important sanitary measure has been the resolution passed by the Corporation to undertake the construction of the Tánsa Reservoir, which, on its completion will ensure the city from the periodical want of water it now occasionally suffers, and will provide the surest means for the safe introduction of water-closets throughout the town.

Nightsoil no longer discharged into Harbour at Carnac Bandar.

During the year the nightsoil has been sent out through the main sewer to Love Grove whence it is pumped into the sea. The Harbour at Carnac Bandar therefore is no longer defiled by the accumulated nightsoil of Bombay.

Leper Asylum.

303. I must also mention that owing to the philanthropic exertions of the Roman Catholic Bishop a house in Trombay has been obtained which is in process of conversion into a Leper Asylum, which will be of the greatest service in affording proper shelter for the unfortunate lepers in Bombay.

Work of Deputy Sanitary Commissioners.

304. Credit is due to the Deputy Sanitary Commissioners for the zealous manner in which they have conducted their duties during the year. A very great amount of additional work was imposed on them in connection with the compilation of vital statistics, and to their careful superintendence the success which has attended the introduction of the new system is very largely owing. At the same time I must cordially acknowledge the valuable assistance afforded by the Collector and District Officers in each Zilla by their bringing whenever required pressure to bear on the village officers so as to ensure the punctual submission of the registers of births and deaths when due.

Surgeon-Major MacRury.

305. Surgeon-Major MacRury returned from furlough in May and resumed charge of his appointment as Deputy Sanitary Commissioner in Sind.

This officer whilst at home passed the Sanitary Science Examination at Cambridge.

In company with the Inspector-General of Prisons he visited Shikárpur and submitted a very careful report on the causes which had led to the excessive mortality among the prisoners in that jail, and made recommendations which were sanctioned by Government and have been attended by the most satisfactory results. He was transferred to the Central Registration District in October and took charge on the 25th of that month.

He has displayed since joining great energy and zeal and has particularly interested himself in the question of sanitary reform in villages.

Surgeon Channer.

306. Surgeon Channer was during the year in charge of the Southern Registration District and did excellent service in connection with a severe epidemic of cholera in the Dhárwár and Belgaum Collectorates and had much trying work in travelling through these districts during the rainy season. He submitted especial reports on no less than 20 towns and villages and made many excellent suggestions for improving their sanitary condition.

Surgeons Clarkson and Peacocke.

307. Surgeon Clarkson was at the commencement of the year in charge of the Konkan Registration District, but went home on furlough in May when he was succeeded by Surgeon Peacocke who on the redistribution of the Collector-

ates took charge of the Western Registration District and has since done much good work, especially in connection with an outbreak of choléra at Karjat and in other tálukas of the Thána Collectorate.

Dr. Colah.

308. Dr. Colah continued during the year in charge of the Eastern Gujarát Registration District and throughout the year evinced his usual zeal and ability. He had much hard work in connection with an outbreak of cholera in Surat and Broach Collectorates and has submitted very practical reports with reference to several towns in his district.

Surgeon Parker.

309. Surgeon Parker was for the first part of the year in charge of the Northern Deccan Registration District, and when the Collectorates were redistributed, of the Central Registration District until October when he was transferred to Sind.

He conducted his duties judiciously and deserves praise for his exertions during a severe outbreak of cholera at Sukkur and Rohri.

Surgeon Tully.

310. Surgeon Tully has continued throughout the year to act as Superintendent of Vaccination in Western Gujarát and has displayed commendable energy in carrying out his work.

Surgeon MacCartie.

311. Surgeon MacCartie was appointed Health Officer of the Port of Bombay in June since which time he has exhibited great zeal and judgment in the performance of his duties.

Assistant Surgeons Ananta Chandroba and Sakhárám Arjun.

312. I regret to record the loss sustained by the Department by the death of Assistant Surgeon Ananta Chandroba, Honorary Assistant Surgeon to the Viceroy, who for a period of 25 years performed his arduous duties as Superintendent of Vaccination, Presidency, with the greatest zeal and judgment and to whose tact the successful introduction of the Compulsory Vaccination Act into the City of Bombay was due. He was succeeded by Assistant Surgeon Sakhárám Arjun, Honorary Assistant Surgeon to the Viceroy, who carried out his work to my satisfaction, but whose untimely death has, I am sorry to say, deprived the Department of a zealous and painstaking officer.

313.* During the year 102 towns and 4 villages were inspected by the Civil Surgeons in the several Collectorates of this Presidency as will be seen by the following statement:—

Statement showing the Number of Towns and Villages inspected by the Civil Surgeons during the year.

Number.	Districts.	By whom inspected.	Number of Towns inspected.	Number of Villages inspected.	Total.
1	Dhulia	Surgeon A. F. Ferguson	...	...	
2	Násik	Honorary Surgeon J. Leahy...	6	...	6
3	Thána	Surgeon K. R. Kirtikar, Civil Surgeon	8	2	10
4	Alibág	Assistant Surgeon Pereira	2	...	2
5	Poona	Surgeon-Major H. Cook, Civil Surgeon ...	9	1	10
6	Ahmednagar	,, ,, H. DeTatham, Civil Surgeon ...	3	.	3
7	Sátára	Surgeon H. B. Briggs, Civil Surgeon	6	...	6
8	Ratnágiri	,, H. McCalman, Civil Surgeon	2	...	2
9	Sholápur	Apothecary W. R. Scroggie in Civil Medical Charge.	5	...	5
10	Belgaum	Surgeon-Major D. Hughes, Civil Surgeon ...	9	...	9
11	Dhárwár	,, ,, G. Bainbridge ,, ,, ...	2	...	2
12	Kaládgi	Assistant Surgeon J. P. Wadia	6	...	6
13	Kárwár	Surgeon W. H. Henderson, Civil Surgeon ...	2	..	2
14	Surat	Surgeon-Major W. Banks, Civil Surgeon ...	3	1	4
15	Kaira	,, W. A. Corkery, Civil Surgeon	6	.	6
16	Godhra	,, K. T. Nariman, Civil Surgeon	2	...	2
17	Broach	Surgeon-Major W. Haliday, Civil Surgeon ...	7	..	7
18	Ahmedabad	,, ,, J. Robb ,, ,, ...	5	...	5
19	Karáchi	,, ,, Keith ,, ,, ...	5	...	5
20	Hyderabad	,, ,, B. C. Keelan ,, ,, ...	6	...	6
21	Sukkur	Surgeon M. L. Bartholomensy ,, ,, ...	2	..	2
22	Shikárpur... . ..	,, H. P. Dimmock, Civil Surgeon ...	6	...	6
23	Jacobabad	Civil Surgeon	...	...	...
			102	4	106

The Civil Surgeon at Dhulia was prevented by his hospital duties from making any inspections, but Surgeon-Major Cook, Civil Surgeon at Poona, made 10 and Surgeon-Major Hughes, Civil Surgeon at Belgaum, 9 inspections.

Many valuable suggestions were made by the Civil Surgeons, and I hope they will lead to the improvement of sanitation of towns and villages in the vicinity of our large towns and Cantonments. A new form of inspection report has been drawn up with the permission of Government which will give useful information in a concise form.

T. G. HEWLETT,
Deputy Surgeon-General,
Sanitary Commissioner.

APPENDIX I.

GENERAL HISTORY OF VACCINATION, FOR THE YEAR 1884-85.

Changes amongst the Supervising Officers.

1. The changes amongst the Supervising Officers during 1884-85 (1st April 1884 to 31st March 1885) were as follows :—

(*a*) In the Western Registration District, Surgeon Clarkson having obtained furlough to Europe for 18 months delivered over charge to Surgeon Kirtikar, the Civil Surgeon of Thána, on 23rd May 1884, who in his turn handed it over to Surgeon Peacocke on 28th idem.

(*b*) In the Presidency Circle Assistant Surgeon Ananta Chandroba was absent from his charge on privilege leave for 3 months in the commencement of the year, when Assistant Surgeon Sakhárám Arjun acted for him. Shortly after his return to duty in May he was obliged to take sick leave, and I much regret to record that he died on the 20th August. This excellent and meritorious officer had for more than 25 years conducted his duties with the greatest zeal and ability. To his tact and judgment the success which has attended the introduction of compulsory vaccination into Bombay is largely owing, and he brought animal vaccination in that City to its present high standard of efficiency. He was succeeded by Assistant Surgeon Sakhárám Arjun whose untimely death on the 16th April 1885 I also with deep regret record. The Department has thus sustained the loss of two able officers.

(*c*) In the Central Registration District Surgeon Parker on being transferred to Sind delivered over charge to Surgeon-Major Cook, the Civil Surgeon of Poona, on 12th October 1884, who in his turn handed it over to Surgeon-Major MacRury, the permanent incumbent, on 26th idem.

(*d*) In Sind Surgeon Peacocke delivered over charge on 22nd May 1884 to Surgeon-Major MacRury, the permanent incumbent, on his return from furlough, who on his transfer to the Central Registration District in October handed over charge to Surgeon Parker.

Strength of the Department.

2. The subjoined table shows in detail the changes in the strength of the Department during the years 1883-84 and 1884-85 :—

133387

No.	Districts and Circles.	Area in Square Miles.	Population according to Census of 1881.	Years.	Sanitary Commissioners. Deputy	Superintendents of Vaccination.	Inspectors of Sanitation and Vaccination.	Assistant Superintendents of Vaccination.	Clerks and Karkúns.	Number of Vaccinators. Government. Civil.	Military.	Municipal.	Cantonment.	Local Fund. Vaccinators.	Candidates.	Native States.	Total.	Number of Peons. Government.	Municipal.	Local Funds.	Native States.	Total.	Total Strength.
1	Western Registration District	26,321·6	3,493,821	1883-84	1	..	6	..	2	..	..	4	..	55	2	2	63	10		55	2	70	142
				1884-85	1	..	6	..	2	..	..	5	1	57	2	2	67	10	4	5	2	73	194
2	Presidency Circle	22	773,196	1883-84	..	1	..	1	17	..	..	9	..	..	..	..	9	..	3	..	..	3	31
				1884-85	..	1	..	1	17	..	..	9	..	..	..	..	9	..	3	..	..	3	31
3	Central Registration District	30,252·1	4,858,709	1883-84	1	..	6	..	2	..	..	7	1	62	5	7	82	10	7	62	10	89	180
				1884-85	1	..	6	..	2	..	..	7	1	62	5	8	83	10	7	62	10	89	181
4	Southern Registration District	24,390·4	4,132,186	1883-84	1	..	5	1	2	..	..	6	..	46	4	25	81	8	5	46	27	86	176
				1884-85	1	..	5	1	2	..	..	7	..	47	4	28	86	8	6	47	30	91	186
5	Eastern Gujarát Registration District	27,712·075	4,162,314	1883-84	1	..	5	..	2	..	..	7	..	37	4	20	68	9	8	37	17	71	147
				1884-85	1	..	5	..	2	..	..	7	..	39	4	21	71	9	8	39	18	74	153
6	Western Gujarát Circle	27,256·43	2,920,377	1883-84	..	1	..	2	2	2	..	..	..	..	..	..	41	43	8	..	..	41	49	97
				1884-85	..	1	..	2	2	2	..	..	..	..	..	..	42	44	8	..	..	42	50	99
7	Sind Registration District	54,123·01	2,542,976	1883-84	1	1	6	..	2	..	..	7	..	49	5	3	64	10	5	49	3	67	141
				1884-85	1	1	6	..	2	..	..	7	..	50	5	3	65	10	5	50	3	68	143
8	Baroda Circle	8,570	2,185,006	1883-84	..	..	3	..	..	..	..	..	..	..	..	..	31	31	..	..	..	34	34	65
				1884-85	..	..	3	..	..	..	..	..	..	..	..	..	31	31	..	..	..	34	34	65
9	Cutch Circle	6,500	512,084	1883-84	..	..	..	1	..	..	..	..	..	..	..	..	17	17	..	..	..	19	19	37
				1884-85	..	..	..	1	..	..	..	..	..	..	..	..	17	17	..	..	..	19	19	37
10	Aden	11·6	34,860	1883-84	..	..	..	..	..	..	..	1	..	..	..	..	1	..	1	..	..	1	2
				1884-85	..	..	..	..	..	..	..	1	..	..	..	..	1	..	1	..	..	1	2
	Military Stations	..	..	1883-84	..	..	..	..	..	..	3	..	..	..	..	..	3	..	..	..	..	..	3
				1884-85	..	..	..	..	..	..	3	..	..	..	..	..	3	..	..	..	..	..	3
	Total	205,159·265	25,615,528	1883-84	5	3	31	5	29	2	3	41	1	249	20	146	462	55	32	249	153	489	1,024
				1884-85	5	3	31	5	29	2	3	43	2	255	20	152	477	55	34	256	158	502	1,052

In the Western Registration District there has been an increase of 1 municipal vaccinator and a peon for the town of Panvel, one Cantonment vaccinator for the Devláli Cantonment and two local fund vaccinators and peons for the Khándesh and Kolába Collectorates. In the Central district one additional vaccinator has been employed in the Sávantvádi State. In the Southern district one municipal vaccinator and a peon were employed in the town of Nipáni, Belgaum Collectorate, one additional local fund vaccinator and a peon in the Collectorate of Kánara, and three more vaccinators and peons in Native States, *viz.*, Sángli Táluka, Kolhápur Petha and Gudgeri. In Eastern Gujarát district the establishment was supplemented by an addition of one local fund vaccinator and 1 peon for the Surat Collectorate. In Western Gujarát district one female vaccinator and a peon were entertained to visit the courts of all the Chiefs of Káthiáwár. In Sind there is an addition of one local fund vaccinator and one peon for the Karáchi Collectorate. In the entire Department there has been an increase of 15 vaccinators and 13 peons—in all 28 persons.

Although not included in the year under report I may mention that additional grants have been sanctioned since 1st April 1885 by the Collectors of Kolába, Belgaum, Dhárwár and Kaira for the entertainment of the requisite number of vaccinators. The Collector of Sátára has also made provision for the employment of a second candidate vaccinator in his Collectorate.

Work amongst the Civil and Military Population.

3. The following table contrasts the work amongst the civil and military population during the year under report with that for 1883-84 :—

Establishment.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1884-85.	1883-84.	Increase.	Decrease.	1884-85.	1883-84.	Increase.	Decrease.	1884-85.	1883-84.	Increase.	Decrease.
In Civil life.												
Itinerant	774,311	792,784	..	18,473 / 2·33	59,999	50,494	9,505 / 18·82	.. / ..	834,310	843,278	..	8,968 / 1·06
Dispensary	24,014	29,986	..	5,972 / 19·92	1,770	2,525	.. / ..	745 / 29·50	25,794	32,511	..	6,717 / 20·64
Total ..	798,325	822,770	..	24,445 / 2·97	61,779	53,019	9,505 / 17·93	745 / 1·41	860,104	875,789	..	15,685 / 1·79
In Army life.												
Native Army ..	3,554	3,698	..	144 / 3·89	1,435	2,846	.. / ..	1,411 / 49·58	4,989	6,544	..	1,555 / 23·76
British Army ..	328	497	..	169 / 34·00	147	1,009	.. / ..	862 / 85·43	475	1,506	..	1,031 / 68·46
Total ..	3,882	4,195	..	313 / 7·46	1,582	3,855	.. / ..	2,273 / 58·96	5,464	8,050	..	2,586 / 32·12
Total for the whole Presidency ..	802,207	826,965	..	24,758 / 2·99	63,361	56,874	9,505 / 16·71	3,018 / 5·31	865,568	883,839	..	18,271 / 2·07

It will be observed that there were 802,207 persons primarily vaccinated and 63,361 re-vaccinated against 826,965 and 56,874 in 1883-84, showing a net decrease of 24,758, or 2·99 per cent., under primary vaccinations, and a net increase of 6,487, or 11·40 per cent., under re-vaccinations. There was a considerable decrease (68·46 per cent.) under total operations amongst British troops, the figures being 475 against 1,506 in the preceding year. The rate of decrease in re-vaccinations was 5·31 per cent., but it was very high amongst European troops, being 85·43 per cent. On the whole, there has been a decrease of 18,271 or, in other words, for every 100 persons operated on in 1883-84 the numbers for this year have been 97·93.

The number of the infants successfully vaccinated in each collectorate.

4. The following table shows for the last two years the number of infants successfully vaccinated in each collectorate, exclusive of Native States. The birth and death statistics are taken for the calendar year in calculating the number, because infants are generally not vaccinated until 3 months after birth :—

No.	Collectorates.	Years.	Children vaccinated successfully.		Children available for Vaccination.	Births returned as having been registered.	Deaths registered among Children under 1 year.
			Those under 1 year.	Those between 1 and 6 years.			
1	Khándesh	1883-84 ...	23,678	12,452	30,300	39,876	9,576
		1884-85 ...	25,036	12,074	38,117	45,170	7,053
2	Násik	1883-84 ...	14,165	7,410	19,077	24,214	5,137
		1884-85 ...	13,154	6,195	21,296	26,263	4,967
3	Thána	1883-84 ...	9,022	7,795	19,725	23,552	3,827
		1884-85 ...	9,918	8,043	20,909	24,644	3,735
4	Kolába	1883-84 ...	6,793	3,300	11,448	13,347	1,899
		1884-85 ...	8,512	4,515	11,482	13,326	1,844
5	Bombay City	1883-84 ...	12,331	2,157	8,418	14,932	6,514
		1884-85 ...	13,449	1,980	8,037	14,377	6,340
6	Ahmednagar	1883-84 ...	20,062	7,508	22,450	28,571	6,121
		1884-85 ...	19,365	7,013	24,796	30,536	5,740
7	Poona	1883-84 ...	13,532	10,631	21,169	25,705	4,536
		1884-85 ...	13,809	9,947	25,430	30,741	5,311
8	Sholápur...	1883-84 ...	10,493	8,904	16,986	20,634	3,648
		1884-85 ...	17,117	7,258	19,253	23,223	3,970

No.	Collectorates.	Years.	Children vaccinated successfully. Those under 1 year.	Those between 1 and 6 years.	Children available for Vaccination.	Births returned as having been registered.	Deaths registered among Children under 1 year.
9	Sátára	1883-84 ...	19,293	16,821	35,028	40,737	5,709
		1884-85 ...	24,334	12,814	37,633	45,484	7,851
10	Ratnágiri	1883-84 ...	11,836	12,484	18,141	19,976	1,835
		1884-85 ...	11,760	12,937	19,002	20,599	1,597
11	Belgaum...	1883-84 ...	10,618	16,412	30,251	35,078	4,827
		1884-85 ...	13,144	9,471	29,494	35,139	5,675
12	Dhárwár...	1883-84 ..	11,792	14,349	32,532	38,927	6,395
		1884-85 ...	17 657	11,094	30,970	38,342	7,372
13	Kaládgi	1883-84 ...	9,734	10,559	18,974	22,436	3,462
		1884-85 ...	13,467	9,230	20,968	24,847	3,879
14	Kánara	1883-84 ...	2,582	7,238	11,153	13,803	2,650
		1884-85 ...	2,785	5,970	9,663	12,327	2,664
15	Surat	1883-84 ...	11,926	4,751	17,518	21,610	4,092
		1884-85 ...	11,531	5,375	18,052	21,455	3,396
16	Broach	1883-84 ...	7,542	2,853	8,748	10,908	2,160
		1884-85 ...	7,666	2,609	8,898	11,454	2,566
17	Kaira	1883-84 ...	18,438	7,015	24,045	28,998	4,953
		1884-85 ...	17,667	6 128	24,305	30,225	5,920
18	Panch Mahále	1883-84 ...	5,522	3,755	5,799	6,629	830
		1884-85 ...	5,726	2,893	7,838	8,926	1,088
19	Ahmedabad	1883-84 ...	22,607	5,087	22,424	26,917	4,493
		1884-85 ...	22,784	4,800	22,073	28,844	6,771
20	Karáchi	1883-84 ...	11,493	3,861	7,260	9,005	1,745
		1884 85 ...	11,431	3,688	8,642	10,637	1,995
21	Hyderabad	1883-84 ...	16,116	5,597	9,909	12,010	2,101
		1884-85 ...	15,350	3,845	10,183	12,757	2,574
22	Thar and Párkar...	1883-84 ..	6,746	2,593	5,376	5,878	502
		1884-85 ...	5,712	2,361	4,387	5,014	627
23	Shikárpur	1883-84 ...	21,836	4,143	13,385	15,865	2,480
		1884-85 ...	22,778	3,788	14,148	17,905	3,757
24	Upper Sind Frontier	1883-84 ...	3,201	952	1,981	2,197	216
		1884-85 ...	3,994	1,365	2,027	2,488	461
	Total ...	1883-84 ...	307,358	178,627	412,093	501,801	89,708
		1884-85 ...	328,646	1,55,393	4,37,580	534,723	97,143

This year the successful vaccinations fell short of the total registered births *minus* deaths amongst those under 1 year old, and in the first 18 districts, except Bombay, the same result is found, and yet the figures are higher than those for last year in the return of infants, and there is a greater proportionate number of successful cases in most of the districts, except Násik, Ahmednagar, Ratnágiri, Surat, Kaira, Karáchi, Hyderabad and Thar and Párkar. On the whole, out of 437,580 infants available for vaccination, 328,646, or 75·11 per cent., have been protected. Last year the percentage was 74·58.

Primary Vaccinations.

5. The next table shows the number of persons primarily vaccinated, as also the increase or decrease for each of the last ten years :—

Primarily vaccinated.	Years ending 31st March. 1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
Persons	671,817	690,639	732,184	670,055	561,969	586,501	642,505	729,323	792,206	826,965	802,207
Increase	..	18,822	41,545	..	..	24,532	56,004	86,818	62,883	34,759	.
Decrease	..	..	..	62,,129	108,086	..	..	..	..	..	24,758

Results in Primary Vaccinations.

Out of 802,207 persons primarily vaccinated, 764,445 cases or 95·29 per cent. were successful, or 0·40 per cent. below 1883-84. The number of unsuccessful cases was in excess of that in the preceding year, being 18,948 against 17,363. 2,868 persons were operated on a second time on account of the failure of the first operation, and in 21,682 cases the result was unknown, as the

children were not again brought for inspection. The following table shows the number of persons primarily vaccinated, and the success among them for the past 10 years :—

	Year ending 31st March.									
	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
Number of persons primarily vaccinated.	690,639	732,184	670,055	561,969	586,501	642,505	729,323	792,206	826,965	802,207
Do. successfully.	660,556	698,148	630,590	531,221	557,840	616,513	703,923	761,745	791,322	764,445
Percentage of success	95·64	95·35	94·11	94·53	95·11	95·95	96·52	96·15	95·69	95·29

Re-vaccinations.

6. The number of persons re-vaccinated and the success among them for the last 10 years are given below :—

	Years ending 31st March.									
	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.
Number of persons re-vaccinated.	117,714	82,993	80,893	69,177	63,122	62,479	56,769	66,505	56,874	63,361
Do. successfully.	94,468	66,770	60,847	49,830	45,435	45,481	40,675	46,429	37,657	41,255
Percentage of success	80·25	80·45	75·22	7,203	71·98	72·79	71·65	69·80	66·21	65·11

Results in re-vaccinations.

During the year, 63,361 persons were re-vaccinated against 56,874 for 1883-84. In 64 instances the re-vaccinations were repeated, in 8,104 instances the results could not be ascertained, and in 14,066 the operation failed. The number of successful cases was 41,255, or 65·11 per 100 against 66·21 in the preceding year.

Total Operations.

7. The subjoined table shows the total number of persons primarily vaccinated and re-vaccinated (taken together), as also the number of successful cases during each of the last 10 years :—

	Years ending 31st March.									
	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885
Persons operated on	808,353	815,177	750,948	631,146	649,623	704,984	786,092	858,711	883,839	865,568
Do. successfully ..	755,024	764,918	691,437	581,051	603,275	661,994	744,598	808,165	828,980	805,700
Percentage of success	93·40	93·83	92·06	92·06	93·87	93·90	94·72	94·11	93·79	93·08

Results in Total Operations.

It will be seen that the total number of persons operated on were 865,568, and of these 805,700, or 93·08 per cent., were successful. In 1883-84 the percentage was 93·79. There were 2,932 persons operated on more than once; the "unsuccessful" numbered 33,014, and the "unknown" cases were 29,786.

Primary Vaccinations, Re-vaccinations and Total Operations by Districts and Circles.

8. The details of the total number of persons operated on for the last two years by Districts and Circles of vaccination, together with the percentages of increase and decrease, are shown on the next page :—

Districts and Circles.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.
Western Registration District.	92,295	96,072	3,777 / 4·09	..	1,671	1,744	173 / 11·01	..	93,866	97,816	3,950 / 4·21	..
Presidency Circle ...	15,823	16,168	345 / 2·18	..	2,716	2,059	..	657 / 24·19	18,539	18,227	..	312 / 1·68
Central Registration District.	160,432	155,201	..	5,231 / 3·26	5,270	5,469	199 / 3·08	..	165,702	160,670	..	5,032 / 3·04
Southern Registration District.	141,822	133,853	..	7,969 / 5·62	5,934	5,034	..	900 / 15·17	147,756	138,887	..	8,869 / 6·00
Eastern Gujarát Registration District.	130,134	123,795	..	6,339 / 4·87	7,371	2,310	..	5,061 / 68·66	137,505	126,105	..	11,400 / 8·29
Western Gujarát Circle .	105,185	101,244	..	3,941 / 3·75	7,690	25,648	17,958 / 233·52	..	112,875	126,892	14,017 / 12·42	..
Sind Registration District.	86,347	83,736	..	2,611 / 3·02	21,731	19,335	..	2,396 / 12·41	108,078	102,771	..	5,307 / 4·92
Baroda	70,728	66,811	..	3,917 / 5·54	466	283	..	183 / 39·27	71,194	67,094	..	4,100 / 5·76
Cutch	18,863	20,486	1,623 / 8·95	..	264	188	..	76 / 28·79	19,067	20,674	1,607 / 8·43	..
Aden, Muscat, Khelat and Bushire.	1,201	959	..	242 / 20·15	6	9	3 / 50·00	..	1,207	968	..	239 / 19·80
British Army	497	328	..	169 / 34·00	1,009	147	..	862 / 85·43	1,506	475	..	1,031 / 68·46
Native do.	3,098	3,554	..	456 / 3·89	2,846	1,435	..	1,411 / 49·58	6,544	4,989	..	1,555 / 23·76
Total ..	826,965	802,207	5,805 / 0·70	30,563 / 3·69	56,874	63,361	18,333 / 32·23	11,846 / 20·83	883,839	865,568	19,574 / 2·21	37,845 / 4·28

Primary Vaccinations. Increase and Decrease by Districts and Circles.

9. In primary vaccinations an increase of 5,805, or 0·70 per cent., took place in three out of twelve districts and circles, namely,—Cutch, Western Registration District and Presidency Circle. The decrease in other districts is 30,563, or 3·69 per cent., nearly treble the rate of increase. These districts stand in the following sequence:—The British Army, Aden, Muskat, Khelat and Bushire, Southern, Baroda, Eastern Gujarát, Native Army, Western Gujarát, Central and Sind Registration Districts, where the rate is only 3·02 per cent.

Re-vaccinations. Increase and Decrease by Districts and Circles.

10. In re-vaccinations an increase of 18,333, or 32·23 per cent., is distributed over the Western Gujarát, Aden, Muskat, Khelat, and Bushire, Western and Central Registration Districts, where the rate is 3·08 per 100. The decrease in other districts amounts to 11,846 or 20·83 per cent. These districts stand in the following sequence:—The British Army, Western Gujarát, Native Army, Baroda, Cutch, Presidency Circle, Southern and Sind Registration Districts; in the last-named the rate was 12·41 per cent.

Total Operations. Increase and Decrease by Districts and Circles.

11. As regards total operations a decrease of 37,845 is to be observed in the British and Native Army, Aden, Muskat, Khelat and Bushire, Eastern Gujarát, Southern, Baroda, Sind, Central and the Presidency Circle, in which the smallest rate of decrease, 1·68 per cent., took place, whilst an increase of 19,574 or 2·21 per cent., is distributed over the Western Gujarát, Cutch and the Western Registration District, in which however it only amounted to 4·21 per cent. The net decrease is 18,271 or 2·07 per cent.

The decrease in the Central and Southern Registration Districts is partly attributable to the prevalence of small-pox and to the consequent greater attention paid by vaccinators in order to ensure the vaccination of infants. Taking the two districts together there is an increase of more than 18,000 infants successfully operated on over the preceding year. The decrease in Eastern Gujarát is owing to the difficulty in finding children in a fit state to be operated upon, as much sickness prevailed in the district and several of the vaccinators were laid up. In this district as in the Presidency Circle the large decrease

under re-vaccination is accounted for by there having been in consequence of an epidemic of small-pox during the previous year a large number of people in the City of Bombay re-vaccinated, and in the Broach Collectorate an order was issued by the Collector calling upon all Government and village servants to submit to re-vaccination. In Western Gujarát there was up to last year a gradual increase in primary vaccinations, but since then re-vaccination has been largely resorted to by the people. The re-vaccinations in this circle amounted to 25,648, being 17,958 more than in the preceding year. In Sind there is a considerable falling off in the Collectorates of Hyderabad and Thar and Párkar under primary vaccinations and in the Collectorate of Karáchi under re-vaccination. This may be partly due to the general unhealthiness of the year rendering people unwilling to bring their children to be vaccinated. In Baroda the decrease is due to the prevalence of small-pox in the Kadi Division during the previous year. The decrease in the army may be accounted for by the high standard of protection and there consequently being fewer men requiring vaccination.

Districts and Circles.	Years.	Persons primarily vaccinated. Caste. Christians.	Hindus.	Musalmans.	Pársis.	Other Castes.	Age. N.—Number. S.—Successful. Under 1 Year.	Between 1 and 6 years.	All other Ages.	Total Number of Persons operated on— P.—Primary Vaccinations. R.—Re-vaccinations. Sex. Males.	Females.	Total.
Western Registration District.	1883-84	999	82,934	3,924	101	4,267	N. 57,388	33,421	1,480	P. 46,720	45,575	92,295
							S. 55,276	32,628	1,381	R. 949	622	1,571
										47,669	46,197	93,866
	1884-85	836	86,368	4,293	114	4,461	N. 60,385	33,665	2,022	P. 48,690	47,382	96,072
							S. 59,224	32,918	1,944	R. 1,146	598	1,744
										49,836	47,980	97,816
Presidency Circle..	1883-84	1,010	8,978	3,130	1,228	1,477	N. 13,006	2,329	488	P. 7,791	8,032	15,823
							S. 12,331	2,157	423	R. 2,150	566	2,716
										9,941	8,598	18,539
	1884-85	830	9,554	3,084	1,200	1,500	N. 13,886	2,089	193	P. 7,937	8,231	16,168
							S. 13,449	1,980	179	R. 1,827	232	2,059
										9,764	8,463	18,227
Central Registration District.	1883-84	948	131,602	8,580	101	19,201	N. 92,522	64,196	3,714	P. 81,751	78,681	160,432
							S. 90,073	62,327	3,458	R. 3,831	1,439	5,270
										85,582	80,120	165,702
	1884-85	689	129,137	7,664	123	17,588	N. 97,168	55,089	2,044	P. 79,101	76,100	155,201
							S. 93,736	54,189	1,843	R. 3,907	1,562	5,469
										83,008	77,662	160,670
Southern Registration District.	1883-84	876	119,857	13,349	4	7,736	N. 57,876	75,392	8,554	P. 72,660	69,162	141,822
							S. 55,906	71,810	7,669	R. 4,366	1,568	5,934
										77,026	70,730	147,756
	1884-85	1,002	113,402	11,833	7	7,609	N. 74,556	53,925	5,372	P. 68,255	65,598	133,853
							S. 70,924	50,879	4,622	R. 3,952	1,082	5,034
										72,207	66,680	138,887
Eastern Gujarát Registration District.	1883-84	96	109,613	10,778	426	9,221	N. 83,402	43,585	3,147	P. 67,911	62,223	130,134
							S. 80,936	42,200	2,931	R. 6,713	658	7,371
										74,624	62,881	137,505
	1884-85	100	105,004	10,144	523	8,024	N. 81,414	39,468	2,913	P. 64,798	58,997	123,795
							S. 79,008	38,066	2,720	R. 2,019	291	2,310
										66,817	59,288	126,105
Western Gujarát Circle.	1883-84	16	85,850	13,100	34	6,185	N. 64,897	38,777	1,511	P. 54,100	51,085	105,185
							S. 60,062	35,095	1,258	R. 4,688	3,002	7,690
										58,788	54,087	112,875
	1884-85	11	84,099	11,692	22	6,020	N. 61,734	37,824	1,686	P. 51,619	49,625	101,244
							S. 56,535	33,051	1,257	R. 15,113	10,535	25,648
										66,732	60,160	126,892
Sind Registration District.	1883-84	157	13,443	66,247	24	6,490	N. 64,239	19,304	2,904	P. 47,256	39,091	86,347
							S. 61,311	18,119	2,585	R. 10,045	11,686	21,731
										57,301	50,777	108,078
	1884-85	128	13,719	62,910	57	6,931	N. 64,445	17,114	2,177	P. 46,013	37,723	83,736
							S. 61,191	15,866	2,007	R. 9,551	9,484	19,035
										55,564	47,207	102,771
Baroda	1883-84	13	61,442	5,281	68	3,924	N. 56,282	13,031	815	P. 37,164	33,564	70,728
							S. 54,315	13,081	750	R. 408	58	466
										37,572	33,622	71,194
	1884-85	12	58,703	4,451	58	3,587	N. 56,647	9,849	315	P. 35,310	31,501	66,811
							S. 54,221	9,275	282	R. 237	46	283
										35,547	31,547	67,094

Results.				Excess of Operations over Persons.	Ratio per 100.																	Excess of Operations over Persons.
					Persons primarily vaccinated.									Total Number of Persons operated on.			Results.				
					Caste.					Age.				Sex.							
Successful.	Unsuccessful.	Unknown.	Total.		Christians.	Hindus.	Mussulmans.	Pársis.	Other Castes.	Under 1 year.	Between 1 and 6 years.	All Other Ages.	Males.	Females.	Total.	Successful.	Unsuccessful.	Unknown.	Total.	
89,96 1,06	1,453 405	1,039 108	92,457 1,575	162 4	1·08	89·85	4·38	0·11	4·62	62·18 60·65	36·21 35·35	1·61 1·47	50·63 60·41	49·33 39·59	100 100	97·47 67·60	1·40 25·53	1·13 6·87	100·13 100·25	0·19 0·25
91,027	1,858	1,147	94,032	166	..	..	..	..	..	..	..	..	50·78	49·22	100	96·98	1·80	1·22	100·18	0·18
94,086 1,215	1,151 232	965 247	96,202 1,744	130 ..	0·87	89·90	4·47	0·12	4·64	62·85 61·65	35·04 34·26	2·11 2·02	50·68 65·71	49·32 34·29	100 100	97·83 69·67	1·06 16·17	1·01 14·16	100·14 100	0·14 ..
96,301	1,433	1,212	97,046	130	..	..	..	..	..	..	..	..	50·95	49·05	100	97·43	1·33	1·24	100·13	0·13
14,911 2,147	718 433	597 136	16,226 2,716	403 ..	6·32	56·74	19·78	7·76	9·34	82·20 77·93	14·72 13·43	3·08 2·68	49·24 79·18	50·76 20·84	100 100	94·24 79·05	1·99 15·94	3·77 5·01	102·55 100	2·55 ..
17,058	1,151	733	18,942	403	..	..	..	..	..	..	..	..	53·62	46·38	100	92·01	4·04	3·95	102·17	2·17
15,608 1,792	818 199	291 68	16,717 2,059	549 ..	5·13	59·09	19·08	7·42	9·28	85·20 83·18	12·22 12·25	1·19 1·11	49·09 88·73	50·91 11·27	100 100	96·54 87·03	1·66 9·67	1·80 3·30	103·40 100	3·40 ..
17,400	1,017	359	18,776	549	..	..	..	..	..	..	..	..	53·57	46·43	100	95·46	2·57	1·97	103·01	3·01
155,858 3,544	1,530 1,299	3,312 428	160,700 5,271	268 1	0·60	82·03	5·35	0·96	11·07	57·67 56·14	40·04 33·85	2·32 2·16	50·96 72·69	49·04 27·31	100 100	97·15 67·25	0·79 24·63	2·06 8·12	100·17 100·02	0·17 0·02
159,402	2,829	3,740	165,971	269	..	..	..	..	..	..	..	..	51·65	48·35	100	96·20	1·54	2·26	100·16	0·16
149,768 3,545	1,797 1,409	3,867 515	155,432 5,469	231 ..	0·44	83·21	4·94	0·08	11·33	62·61 60·40	36·08 34·91	1·31 1·19	50·97 71·44	49·03 28·56	100 100	96·50 64·82	1·01 25·76	2·49 9·42	100·14 100	0·14 ..
153,313	3,206	4,382	160,901	231	..	..	..	..	..	..	..	..	51·66	48·34	100	95·42	1·85	2·73	100·14	0·14
134,785 3,907	2,283 1,269	5,009 765	142,077 5,941	255 7	0·61	84·51	9·41	0·02	5·45	40·81 39·00	53·16 50·65	6·03 5·46	51·23 75·88	48·77 26·42	100 100	95·04 65·84	1·43 21·27	3·53 12·89	100·18 100·12	0·18 0·12
138,692	3,552	5,774	148,018	262	..	..	..	..	..	..	..	..	52·13	47·87	100	93·87	2·23	3·90	100·18	0·18
126,425 3,432	2,775 1,071	4,979 540	134,179 5,043	326 9	0·75	84·72	8·84	0·01	5·68	55·76 52·99	40·29 38·01	4·01 3·45	50·99 78·51	49·01 21·49	100 100	94·45 68·18	1·83 21·10	3·72 10·72	100·24 100·18	0·24 0·18
129,857	3,846	5,519	139,222	335	..	..	..	..	..	..	..	..	51·92	48·01	100	93·50	2·53	3·97	100·24	0·24
126,127 4,079	2,796 2,458	1,984 837	130,707 7,374	573 3	0·07	84·23	5·28	0·33	7·09	64·09 62·20	33·49 32·47	2·42 2·26	52·19 91·01	47·81 8·93	100 100	96·02 55·34	1·55 33·31	1·53 11·35	100·44 100·04	0·44 0·04
130,206	5,054	2,821	138,081	576	..	..	..	..	..	..	..	..	54·27	45·73	100	94·69	3·26	2·03	100·42	0·42
119,794 4,368	2,802 580	1,827 363	124,423 2,311	628 1	0·08	84·82	8·20	0·42	6·48	65·77 63·82	31·88 30·76	2·35 2·20	52·34 87·40	47·66 12·60	100 100	96·77 69·22	1·76 25·07	1·47 15·71	100·51 100·04	0·51 0·04
121,162	3,382	2,100	126,734	629	..	..	..	..	..	..	..	..	52·99	47·01	100	95·68	2·18	1·74	100·50	0·50
96,415 6,299	5,132 16,25	3,769 767	105,316 7,691	131 1	0·02	81·62	12·45	0·03	5·88	61·70 57·10	36·86 33·27	1·44 1·20	51·43 60·96	48·57 39·04	100 100	91·67 68·91	4·75 21·12	3·58 9·97	100·12 100	0·12 ..
101,714	6,757	4,536	113,007	132	..	..	..	..	..	..	..	..	52·08	47·92	100	90·11	5·87	4·02	100·12	0·12
91,443 16,236	5,570 6,528	4,423 2,885	101,436 25,652	102 4	0·01	83·07	10·96	0·02	5·98	60·98 55·84	37·26 33·24	1·66 1·24	50·93 53·92	49·02 41·08	100 100	90·32 63·30	5·81 25·44	4·37 11·26	100·19 100·02	0·19 0·02
107,679	12,098	7,311	127,088	106	..	..	..	..	..	..	..	..	52·59	47·41	100	84·85	9·38	5·76	100·15	0·15
81,959 14,856	1,441 3,743	3,313 3,212	86,713 21,811	366 80	0·16	15·57	76·72	0·03	7·52	74·40 71·00	22·35 20·98	3·25 2·94	54·73 46·22	45·27 53·78	100 100	94·22 68·35	1·24 16·86	3·84 14·78	100·42 100·37	0·42 0·37
96,815	5,184	6,525	108,524	446	..	..	..	..	..	..	..	..	53·02	46·98	100	89·57	4·38	6·05	100·41	0·41
72,064 12,315	1,409 3,206	3,633 3,461	84,106 19,072	370 37	0·15	16·37	75·13	0·07	8·29	76·96 73·07	20·44 18·95	2·60 2·40	54·94 50·18	45·06 49·82	100 100	94·42 64·70	1·24 17·12	4·34 18·18	100·44 100·19	0·44 0·19
84,379	4,705	7,094	103,178	407	..	..	..	..	..	..	..	..	54·07	45·93	100	88·92	4·18	6·90	100·40	0·40
68,146 342	1,358 112	1,395 26	70,899 488	171 14	0·02	86·87	7·47	0·09	5·55	79·58 79·20	19·27 18·49	1·15 1·06	52·54 87·55	47·46 12·45	100 100	96·35 73·39	1·68 21·03	1·97 5·58	100·24 103·00	0·24 3·00
68,488	1,470	1,421	71,379	185	..	..	..	..	..	..	..	..	52·77	47·23	100	96·20	1·90	2·06	100·26	0·26
66,778 210	1,832 63	1,459 10	67,069 283	258 ..	0·02	87·86	6·66	0·09	5·37	84·79 81·16	14·74 13·88	0·47 0·42	52·85 83·75	47·15 16·25	100 100	95·46 74·20	2·36 22·26	2·18 3·54	100·38 100	0·38 ..
66,988	1,895	1,468	67,352	258	..	..	..	..	..	..	..	..	52·98	47·02	100	95·37	2·44	2·19	100·38	3·80

Districts and Circles.	Years.	Persons primary vaccinated. Caste. Christians.	Hindus.	Musalmáns.	Pársis.	Other Castes.	Age. N—Number. S—Successful. Under 1 year.	Between 1 and 6 years.	All other Ages.	Total Number of Persons operated on. P.—Primary Vaccinations. R.—Re-vaccinations. Sex. Males.	Females.	Total.
Cutch	1883-84	1	13,834	4,964	4	..	N. 11,036	6,791	976	P. 9,539	9,264	18,803
							S. 10,938	6,734	966	R. 240	24	264
										9,779	9,288	19,067
	1884-85	7	15,175	5,301	2	1	N. 12,324	7,078	1,084	P. 10,555	9,921	20,476
							S. 12,233	7,007	1,070	R. 153	35	188
										10,708	9,966	20,674
Aden, Muskat, Khelat and Bushire.	1883-84	..	8	1,161	..	32	N. 157	641	403	P. 785	416	1,201
							S. 131	559	235	R. 4	2	6
										789	418	1,207
	1884-85	..	41	856	5	57	N. 237	499	223	P. 642	317	959
							S. 202	400	136	R. 6	3	9
										648	320	968
British Army	1883-84	177	238	55	1	26	N. 436	43	18	P. 287	230	497
							S. 406	42	18	R. 840	149	1,009
										1,127	379	1,506
	1884-85	145	153	13	2	15	N. 277	29	22	P. 171	157	328
							S. 256	29	20	R. 135	12	147
										306	169	475
Native Army	1883-84	85	2,133	1,008	13	459	N. 3,041	472	185	P. 2,052	1,646	3,698
							S. 2,620	366	142	R. 2,430	416	2,846
										4,482	2,062	6,544
	1884-85	59	1,931	1,122	11	431	N. 2,832	409	313	P. 1,921	1,633	3,554
							S. 2,601	300	220	R. 1,153	282	1,435
										3,074	1,915	4,989
Total for the Bombay Presidency.	1883-84	4,358	629,932	131,647	2,004	59,024	N. 504,282	298,582	24,101	P. 427,096	398,969	826,065
							S. 484,405	285,172	21,746	R. 36,684	20,100	56,574
										464,080	419,159	883,639
	1884-85	3,819	617,277	122,763	2,124	56,224	N. 525,905	257,938	18,364	P. 415,012	387,195	802,207
							S. 503,585	244,560	16,300	R. 39,199	24,162	63,361
										454,211	411,357	865,568

Particulars of vaccine operations by caste, age, sex and result, with their percentages according to Districts and Circles.

12. The above table specifies, by districts and circles, caste, age, sex and result in primary vaccinations, and sex and result in re-vaccinations and total operations as contrasted with those in 1883-84. It will be observed that there is an improvement in the infantile vaccinations over that of last year as regards numbers as well as percentages.

Caste.

13. During the year there were primarily vaccinated 3,819 Christians, 617,277 Hindus, 122,763 Musalmáns, 2,124 Pársis, and 56,224 persons of Other Castes, and for all, except Pársis, the numbers are lower than last year, the respective percentages being 0·48, 76·95, 15·30, 0·26 and 7·01; the percentages for Hindus and Pársis are however higher by only 0·78 and 0·02 respectively. As regards each district and circle, Christians have a lower percentage in all, except the Southern, Eastern Gujarát, Cutch and British Army. The percentages for Hindus are lower in the British and Native army only; and for Musalmáns they are lower in all the districts and circles except the Western Registration District and Native Army. Pársis have a higher percentage in the Western, Central, Eastern Gujarát, Sind, Aden, Muskat, Khelat and Bushire, and British Army. The percentages for Other Castes are higher in the Western, Central, Western Gujarát, Sind, Aden, Muskat, Khelat and Bushire.

Results.				Excess of Operations over Persons.	Ratio per 100.																	
					Persons primarily vaccinated.									Total Number of Persons operated on			Results.					
					Caste.					Age.				Sex.								
Successful.	Unsuccessful.	Unknown.	Total.		Christians.	Hindus.	Mussulmans.	Pársis.	Other Castes.	Under 1 year.	Between 1 and 6 years.	All other Ages.	Males.	Females.	Total.	Successful.	Unsuccessful.	Unknown.	Total.	Excess of Operations over Persons.
18,633 231	219 33	28 ..	18,880 264	82 ..	0·01	73·57	26·40	0·02	..	53·69 58·17	36·12 35·81	5·19 5·14	50·73 90·91	49·27 9·00	100 100	99·12 87·50	0·73 12·50	0·15 ...	100·43 100·	0·43 ..
18,864	252	28	19,149	82	..	..	..	..	..	..	..	..	51·29	48·71	100	98·96	0·89	0·15	100·43	0·43
20,315 170	279 31	73 ..	20,667 201	181 13	0·03	74·08	25·88	0·01	..	60·16 59·74	34·55 34·21	5·29 5·22	51·52 81·38	48·48 18·62	100 100	99·17 90·43	0·48 9·57	0·35 ..	100·88 100·70	0·88 0·70
20,485	310	73	20,868	194	..	..	..	..	..	..	..	..	51·79	48·21	100	99·09	0·56	0·35	100·94	0·94
925 4	157 2	121 ..	1,203 6	2 ...	..	0·67	96·67	..	2·66	13·07 10·91	53·37 46·54	33·56 19·57	65·36 66·67	34·64 33·33	100 100	77·02 66·67	12·91 33·33	10·07 ..	100·17 100·	0·17 ..
929	159	121	1,209	2	..	..	..	..	..	..	..	..	65·37	34·63	100	76·97	13·01	10·02	100·17	0·17
738 4	123 5	99 ..	960 9	1 ..	..	4·28	89·26	0·52	5·94	24·71 21·06	52·03 41·71	23·26 14.18	66·94 66·67	33·06 33·33	100 100	76·95 44·44	12·72 55·56	10·33 ..	100·10 100·	0·10 ..
742	128	99	969	1	..	..	..	..	..	..	..	..	60·94	33·05	100	76·65	13·12	10·23	100·10	0·10
466 619	31 398	1 ..	498 1,017	1 8	35·61	47·89	11·07	0·20	5·23	87·73 81·69	8·65 8·45	3·62 3·62	53·72 35·23	46·28 14·77	100 100	93·76 61·35	6·04 38·65	0·20 ..	100·20 100·79	0·20 0·79
1085	429	1	1,515	9	..	..	..	..	..	..	..	..	74·83	25·17	100	72·04	27·89	0·07	100·60	0·60
205 114	22 32	1 1	328 147	.. ..	44·21	45·65	3·96	0·61	4·57	84·15 78·05	8·84 8·84	6·71 6·10	52·13 91·84	47·87 8·16	100 100	92·99 77·55	6·11 21·77	0·30 0·68	100· 100·	.. ..
419	54	2	475	..	..	..	..	..	..	..	..	..	64·42	35·58	100	88·21	11·37	0·42	100·	..
3,128 1,567	445 1,280	144 10	3,717 2,857	19 11	2·30	57·68	27·26	0·35	12·41	82·23 70·85	12·77 9·90	5·00 3·84	55·49 85·38	44·51 14·62	100 100	84·59 55·06	11·52 44·29	3·89 0·35	100·51 100·04	0·51 0·04
4,696	1,725	154	6,574	30	..	..	..	..	..	..	..	..	68·49	31·51	100	71·75	25·90	2·35	100·46	0·46
2,121 854	370 570	65 11	3,556 1,435	2 ..	1·66	54·33	31·67	0·31	12·13	79·99 73·19	11·51 8·44	8·50 6·19	54·05 80·35	45·95 19·65	100 100	87·32 59·51	10·35 39·72	1·83 0·77	100·06 100·	0·06 ..
3,975	940	76	4,991	2	..	..	..	..	..	..	..	..	61·62	38·38	100	79·68	15·80	1·52	100·04	0·04
791,323 37,657	17,363 18,057	20,712 6,289	829,398 57,003	2,433 129	0·53	76·17	15·92	0·24	7·14	60·06 58·58	30·11 34·48	2·01 2·03	51·76 64·60	48·24 35·50	100 100	95·69 66·21	1·81 22·73	2·50 11·06	100·29 100·28	0·29 0·28
828,980	30,420	27,001	886,401	2,562	..	..	..	..	..	..	..	..	52·58	47·42	100	93·79	3·15	3·06	100·29	0·29
764,445 41,255	18,948 14,006	21,682 8,104	805,075 63,425	2,868 64	0·48	76·95	15·30	0·26	7·01	65·56 62·77	32·15 30·49	2·29 2·03	51·73 61·87	48·27 38·13	100 100	95·29 65·11	2·01 22·10	2·70 12·79	100·36 100·10	0·36 0·10
805,700	32,014	29,786	868,500	2,932	..	..	..	..	..	..	..	..	52·48	47·52	100	93·06	3·48	3·44	100·34	0·34

Age.

14. The age details are compiled for three periods, viz. under 1 year, between 1 and 6 years, and above 6 years. The numbers under each period primarily vaccinated were respectively 525,905, 257,938, and 18,364 against 504,282, 298,582, and 24,101 during the preceding year. The number of infants successfully vaccinated was 503,585, of children between 1 and 6 years 244,560, and of persons of other ages 16,300. Thus out of every 100 persons primarily vaccinated, there were 65·56 infants, of whom 62·77 were successfully vaccinated. Compared with the preceding year, this rate is higher by 4·19 per cent; the difference between the numbers vaccinated and the successful cases being 0·39 per cent. more than last year.

Infants successfully vaccinated as compared with those available for vaccination by Districts and Circles at the rate of 31 per mille of population.

15. At the rate of 31 per mille of population and on the total population of 25,615,528, there were successfully vaccinated 63·41 per cent. against 61·00 in 1883-84, 59·01 in 1882-83, 58·35 in 1881-82, 49·27 in 1880-81 ,and 39·78 in 1879-80. Thus every year is characterised by progress in the protection afforded to infants. The subjoined table shows the number of infants protected out of those available for vaccination (at the rate of 31 per mille of population)

by districts and circles, as likewise the protection of children between one and six years old :—

Districts and Circles.	Population.	Children under 1 year available for Vaccination at 31 per 1,000.	Years.	Children under 1 year vaccinated successfully.		Children between 1 and 6 Years vaccinated successfully.	
				Number.	Ratio per 100 on Infants.	Number.	Ratio per 100 on Total Vaccinated.
1. Baroda	2,185,005	67,735	1883-84	54,315	80·19	13,081	18·49
			1884-85	54,221	80·05	9,275	13·88
2. Sind	2,542,976	78,832	1883-84	61,311	77·77	18,113	20·98
			1884-85	61,191	77·62	15,866	18·95
3. Cutch	512,084	15,874	1883-84	10,938	68·91	6,734	35·81
			1884-85	12,238	77·10	7,007	34·21
4. Western Gujarát ...	2,920,377	90,532	1883-84	69,062	66·34	35,095	33·37
			1884-85	56,535	62·45	33,651	33·24
5. Central	4,858,709	150,620	1883-84	90,073	59·80	62,327	39·85
			1884-85	93,736	62·23	54,189	34·91
6. Eastern Gujarát ...	4,162,314	129,032	1883-84	80,936	62·73	42,260	32·47
			1884-85	79,008	61·23	38,066	30·75
7. Presidency Circle ...	773,196	23,969	1883-84	12,331	51·45	2,157	13·63
			1884-85	13,449	56·11	1,980	12·25
8. Southern... ...	4,132,186	128,098	1883-84	55,306	43·17	71,810	50·63
			1884-85	70,924	55·37	50,879	38·01
9. Western	3,493,821	108,308	1883-84	55,976	57·68	32,628	35·35
			1884-85	59,224	54·68	32,918	34·26
10. Aden, Muskat, Khelat and Bushire ...	*34,860	1,081	1883-84	131	12·12	559	46·54
			1884-85	202	18·69	400	41·71
11. Native Army ...	...	...	1883-84	2,620	...	366	9·90
			1884-85	2,601	...	300	8·44
12. British Army ...	...	...	1883-84	406	...	42	8·45
			1884-85	256	...	29	8·84
Total ...	25,615,528	794,081	1883-84	484,405	61·00	285,172	34·48
			1884-85	503,585	63·41	244,560	30·49

* Of Aden only.

The Southern holds the same place as last year in this respect, though there is a considerable rise in the percentage of infants protected. Baroda stands first, having a percentage of 80·05 infants protected instead of 80·19 last year. There is a rise in the percentages of infants protected in all the districts and circles, except in Baroda, Sind, the Eastern Gujarát and Western Gujarát, where the fall amounts to only 3·89 per cent. The highest rise is observed in the Southern Registration District to the extent of 12·20 per cent.

Sex.

16. There were 415,012 males and 387,195 females primarily vaccinated. The re-vaccinated were respectively 39,199 and 24,162, and the totals of persons operated on were 454,211 males and 411,357 females. In primary vaccinations the sex percentages are respectively 51·73 and 48·27 against 51·76 and 48·24 last year; in re-vaccinations they are 61·87 and 38·13 against 64·50 and 35·50; and in total operations they are 52·48 and 47·52 against 52·58 and 47·42.

Results.

17. There is a slight fall in the percentage of "successful" cases. In primary vaccinations there were 764,445, or 95·29 per cent. successful; 18,948, or 2·01 per cent., unsuccessful; and 21,682, or 2·70 per cent., unknown. Secondary operations amounted to 2,868 or 0·36 per cent. The percentages for 1883-84 were respectively 95·69, 1·81, 2·50 and 0·29.

There is a fall in successful re-vaccinations to the extent of 1·10 per cent. The three kinds of result afforded the respective percentages of 65·11, 22·10 and 12·79 against 66·21, 22·73 and 11·06 in the previous year. In 64 cases or 0·10 per cent. the re-vaccinations were repeated; last year they were repeated in 129 instances.

Of total operations 805,700, or 93·08 per cent., were successful; 33,014, or 3·48 per cent., were unsuccessful; and 29,786, or 3·44 were unknown. Last

year the percentages were respectively 93·79, 3·15 and 3·06. The excess of operations over persons was 2,932, or 0·34 per 100 against 2,562, or 0·29 per cent., in 1883-84. In calculating the percentages of unsuccessful cases these numbers have been excluded.

Percentages of success reviewed by Districts and Circles.

18. The following table shows by districts and circles the percentages of success in primary vaccinations and re-vaccinations contrasted with those for the previous year :—

No.	Districts and Circles.	Percentages of Success in Primary Vaccinations.		Percentages of Success in Re-vaccinations.	
		1883-84.	1884-85.	1883-84.	1884-85.
1	Cutch Circle	99·12	99·17	87·50	90·43
2	Western Registration District	97·47	97·93	67·60	69·67
3	Eastern Gujarát Registration District ...	96·92	96·77	55·34	59·22
4	Presidency Circle	94·24	96·54	79·05	87·03
5	Central Registration District	97·15	96·50	67·25	64·82
6	Baroda Circle	96·35	95·46	73·39	74·20
7	Southern Registration District	95·04	94·45	65·84	68·18
8	Sind Registration District	94·92	94·42	68·36	64·70
9	British Army	93·76	92·99	61·35	77·55
10	Western Gujarát Circle	91·67	90·32	68·91	63·30
11	Native Army	84·59	87·82	55·06	59·51
12	Aden, &c.	77·02	76·95	66·67	44·44
	Average for the whole Presidency ...	95·69	95·29	66·21	66·21

In the "successful" primary vaccinations the percentages are lower than last year in eight out of twelve districts and circles. In Cutch, Western Registration District, Presidency Circle and Native Army they are higher owing to there being fewer "unsuccessful" and "unknown" cases than last year. But in Cutch they are attributable to there being more "successful" cases than in 1883-84.

Rate per mille of population protected by Primary Vaccinations by Districts and Circles.

19. The number of persons primarily vaccinated successfully out of every 1,000 by districts and circles, as compared with 1883-84, is shown in the table below :—

No.	Districts and Circles.	Population of Registration Districts and Circles according to the Census of 1881.	Total Number of Persons primarily vaccinated successfully.		Number of Primary successful Vaccinations per 1,000 of Population.	
			1883-84.	1884-85.	1883-84.	1884-85.
1	Cutch	512,984	18,638	20,315	36·40	39·67
2	Western Gujarát Circle	2,920,377	96,415	91,443	33·01	31·31
3	Sind Registration District	2,542,976	81,959	79,064	32·23	31·09
4	Central Registration District	4,858,709	155,858	149,768	32·08	30·82
5	Southern Registration District	4,132,186	134,785	126,425	32·62	30·60
6	Baroda	2,185,005	68,146	63,778	31·19	29·19
7	Eastern Gujarát Registration District...	4,162,314	126,127	119,794	30·30	28·78
8	Western Registration District	3,493,821	89,965	94,086	25·75	26·93
9	Aden, Muskat, Khelat and Bushire ...	34,860	925	738	26·53	21·02
10	Presidency Circle...	773,196	14,911	15,608	19·28	20·19
11	British Army	.....	466	305	...	...
12	Native Army	.....	3,128	3,121	...	...
	Total ...	25,615,528	791,323	764,445	30·89	29·84
	In British Territory	16,503,663	504,496	497,482	30·57	30·14
	In Native States	9,111,865	286,827	266,963	31·49	29·30

The rate of protection is higher than last year in the Western Registration District, the Presidency Circle and in Cutch. It is lowest in Aden, Muscat, Khelat and Bushire and Presidency Circle. In British and Native territory it is respectively 30·14 and 29·30 against 30·57 and 31·49 per mille of population in the

previous year. On the whole, 29·84 persons of all ages per every 1,000 of population, against 30·89 last year, 29·74 in 1882-83, 27·54 in 1881-82, and 24·60 in 1880-81, were primarily vaccinated successfully.

Vaccinations by Establishments.

20. The progress of vaccination by different establishments will be seen from the subjoined table :—

Establishments.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.
2 Government Vaccinators	6,400	4,397	..	2,003	536	252	..	284	6,936	4,649	..	2,287
				31·30				52·99				32·97
				2,564				1,823				4,492
42 Municipal	59,559	56,895	..	4·47	8,826	6,998	..	20·71	68,385	63,893	..	65·69
2 Cantonment ..	1,465	1,465	20		252	309	57	..	1,717	1,794	77	..
			1·37	..			2·26				4·49	
255 Local Fund ..	441,180	441,340	160	..	30,327	23,159	..	7,168	471,507	464,499	..	7,008
			0·04					23·64				1·49
152 Native States ..	284,180	270,194	..	13,986	10,553	29,281	18,728	..	294,733	299,475	4,742	..
				49·22			177·47				1·61	
160 Dispensaries ..	29,986	24,014	..	5,972	2,525	1,780	..	745	32,511	25,794	..	6,717
				19·22				29·50				20·66
British Army	497	328	..	169	1,009	147	..	861	1,506	475	..	1,031
				34·00				85·43				68·45
Native Army	3,698	3,554	..	144	2,846	1,435	..	1,411	6,544	4,989	..	1,555
				3·89				49·58				23·76
Total ..	826,965	802,207	180	24,938	56,874	63,361	18,785	12,298	883,839	865,568	4,819	23,090
			0·02	3·02			33·03	21·62			0·54	2·61

In primary vaccinations a decrease is observed under all, except the Cantonment and Local Fund establishments, amounting to 24,938, or 3·02 per cent., the maximum rate of decrease being 49·22 per cent. under Native States. In re-vaccinations there is an increase of 18,785, or 33·03 per cent. under Cantonment and Native States, but there is a considerable decrease, amounting to 12,298, in the remainder, or 21·62 per cent. Taking the two kinds of operations together, there is an increase of 48·19, or 0·54 per cent., and a decrease of 23,090, or 2·61 per cent., in the work of the Government, Municipal and Local Fund vaccinators and in the dispensaries and the army generally.

Results in Vaccine Operations by Establishments.

21. The results in primary vaccinations, re-vaccinations, and total operations, as analysed by establishments, are as under :—

Establishment.	Year.	Results in Primary Vaccinations.					Results in Re-vaccinations.					Results in Total Operations.				
		Successful.	Unsuccessful.	Unknown.	Total.	Excess of Operations.	Successful.	Unsuccessful.	Unknown.	Total.	Excess of Operations.	Successful.	Unsuccessful.	Unknown.	Total.	Excess of Operations.
2 Government Vaccinators.	1883-84	6,165	62	181	6,415	15	473	55	8	536	..	6,638	124	189	6,951	15
	1884-85	4,349	50	107	4,406	9	226	22	5	253	1	4,475	72	112	4,659	10
42 Municipal Vaccinators.	1883-84	56,670	1,631	1,811	60,112	553	6,610	1,268	954	8,832	6	63,280	2,899	2,765	68,944	559
	1884-85	54,582	1,584	1,382	57,548	653	4,867	979	1,157	7,003	5	59,449	2,563	2,539	64,551	658
2 Cantonment Vaccinators.	1883-84	1,449	7	9	1,465	..	131	120	1	252	..	1,580	127	10	1,717	..
	1884-85	1,472	3	10	1,485	..	173	117	19	309	..	1,645	120	29	1,794	...
255 Local Fund Vaccinators.	1883-84	426,408	5,724	10,108	442,240	1,060	19,635	6,755	4,021	30,414	37	446,043	12,479	14,133	472,654	1,147
	1884-85	425,148	5,158	11,174	442,480	1,140	15,229	4,866	3,605	23,200	41	440,377	10,024	14,779	465,680	1,181
152 Native States Vaccinators.	1883-84	269,398	7,984	7,942	284 824	644	7,241	2,290	1,037	10,568	15	276,839	10,274	8,279	295,392	659
	1884-85	253,942	9,285	7,954	271,181	987	18,653	7,421	3,244	29,298	17	272,575	16,706	11,198	300,479	1,004
160 Dispensaries.	1883-84	27,429	1,472	1,216	30,127	147	1,361	891	255	2,527	2	28,820	2,363	1,471	32,654	143
	1884-85	21,626	1,476	989	24,091	77	1,159	559	62	1,789	..	22,785	2,035	1,051	25,871	77
British Army ..	1883-84	466	31	1	498	1	619	398	..	1,017	8	1,085	429	1	1,515	9
	1884-85	305	22	1	328	..	114	32	1	147	..	419	54	2	475	..
Native Army ..	1883-84	3,128	445	144	3,717	19	1,567	1,280	10	2,857	11	4,695	1,725	154	6,574	30
	1884-85	3,121	370	65	3,556	2	854	570	11	1,435	..	3,975	940	76	4,991	2
Total for the Bombay Presidency.	1883-84	791,323	17,363	20,712	829,398	2,423	37,657	13,057	6,289	57,003	129	828,980	30,420	27,001	886,401	2,552
	1884-85	764,445	18,948	21,682	805,075	2,868	41,255	14,066	8,104	63,425	64	805,700	33,014	29,786	868,500	2,932

In primary vaccinations the number of successful cases was less than last year for each establishment, except the Cantonment, owing to the smaller number of operations performed, though the number of unsuccessful cases was more in the Local Fund and Native State establishments and dispensaries. The unknown cases outnumber the unsuccessful in Government, Cantonment and

Local Fund establishments and are more than last year in Cantonment, Local Fund and Native State establishments.

In re-vaccinations the successful cases are less than last year in all establishments, except the Cantonment and Native States, owing to the lesser number of re-vaccinations, but among the Native State vaccinators they were more than double the number in 1883-84. The intensity of the protective power of primary vaccine operations may be judged by the unsuccessful re-vaccinations. The unsuccessful and unknown cases are more than in 1883-84 on the whole and also in Municipalities, Cantonments and Native States.

Percentages of success reviewed by Establishments.

22. The percentages of successful cases in each kind of operation by establishments are given below:—

ESTABLISHMENTS.	Government.	Municipal.	Cantonment.	Local Fund.	Native States.	Dispensaries.	British Army.	Native Army.	For the whole Presidency.
In Primary Vaccinations.									
Percentage of success ... 1883-84 ...	96·33	95·15	98·91	96·65	94·87	91·51	93·76	84·59	95·69
Percentage of success ... 1884-85 ...	96·63	95·93	99·12	96·33	93·99	90·06	92·99	87·82	95·29
In re-vaccinations.									
Percentage of success ... 1883-84 ...	88 25	74·89	51·98	64·74	68·62	54·69	61·35	55·06	66·21
Percentage of success ... 1884-85 ...	89·68	69·55	55·99	65·76	63·64	65·11	77·55	59·51	65·11

In primary vaccinations the percentages are higher than in the preceding year in Government, Municipal and Cantonment establishments and in Native Army. The highest percentage is 99·12 in Cantonment and the lowest is 87·82 in the Native Army. The next highest is 96·63 in Government and the next lowest is 90·06 in Dispensaries. In re-vaccinations the lowest percentage is 55·99 in Cantonment and the highest is 89·68 under Government.

Work of Establishments by Districts and Circles.

23. The work of the different establishments by districts and circles is as follows:—

Work of Government Vaccinators.

24. There are 2 vaccinators for the cantonments of Rájkot and Deesa, paid from Provincial Funds, who work under the Superintendent of Vaccination, Western Gujarát Circle. Half the cost of vaccination in Deesa is borne by the Cantonment Committee. Besides these 2, there are 3 others under the Station Staff Surgeons for the military stations of Mhow, Neemuch and Nasirabad, paid from "Military Funds". Their work is included under the head of Native Army and Camp Followers. The Rájkot and Deesa vaccinators work among a population of 126,019 souls in an area of 1,135 square miles. There were 4,397 persons primarily vaccinated and 252 re-vaccinated, against 6,400 and 536 in the previous year. The successful cases were, respectively, 4,249 and 226, or 96·63 and 89·68 per cent: so, taking the two operations together, 35·51 per thousand of population were protected against 52·67 last year. The total cost was Rs. 473-1. The cost of each successful case was anna 1 and pies 8, or 5 pies more than last year. In primary vaccinations the unsuccessful cases were 50 and of unknown 107. In re-vaccinations the unsuccessful and the unknown were 22 and 5. Secondary operations, after the failure of the first, were performed on 19 persons and in one case the re-vaccination was repeated. Each vaccinator averaged 2,324 persons.

Work of Cantonment Vaccinators.

25. There are two vaccinators, one for the Cantonment of Devláli and one for the Cantonments of Poona and Kirkee, which cover an area of 8·78 square miles and contain a population of 40,350 persons. The work of the former is supervised by the Deputy Sanitary Commissioner, Western Registration District, and that of the latter by the Deputy Sanitary Commissioner, Central Registration District. A special vaccinator has since December 1884 been entertained for the trooping season only in the Cantonment of Devláli on a salary of Rs. 13 with contingencies of annas 8 per month. They primarily vaccinated 1,485 and re-vaccinated 309 persons. Last year these numbers were respectively 1,465 and 252. In primary vaccinations 1,472, or 99·12 per cent., were successful, and in

re-vaccination 173 or 55·99 per cent., were successful. The rate of protection per mille of population was 40·77. Last year it was 42·27. The total cost was Rs. 665 and annas 3, or annas 6 and pies 6 for each successful case; last year it was annas 6·8. There were 3 unsuccessful and 10 unknown cases under primary vaccinations, and among re-vaccinations they were respectively 117 and 9. None were operated on more than once. Each vaccinator averaged 897 persons.

Work of Municipal Vaccinators.

26. The following table gives the progress of vaccination by districts and circles under municipal vaccinators :—

Districts and Circles.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.
Western Registration District.	3,614	3,337	...	277	108	269	161	...	3,722	3,606	...	116
Presidency Circle	15,823	16,168	345	...	2,345	1,874	...	471	18,168	18,042	...	126
Central Registration District..	11,259	10,934	...	325	873	1,167	294	...	12,132	12,101	...	31
Southern Registration District.	9,125	7,246	...	1,879	853	427	...	426	9,978	7,673	...	2,305
Eastern Gujarát Registration District	10,615	10,643	28	...	576	237	...	339	11,191	10,880	...	311
Sind Registration District ...	8,542	8,156	...	386	4,067	3,023	...	1,044	12,609	11,179	...	1,430
Aden	581	411	..	170	4	1	...	3	585	412	...	173
Total ...	59,559	56,895	373	3,037	8,826	6,998	455	2,283	68,385	63,893	...	4,492

In primary vaccinations a decrease of 3,037 is observed in all the districts, except the Presidency Circle and Eastern Gujarát where the increase amounts to only 373. In re-vaccinations there is an increase of 455 in the Western and Central Registration Districts only; this increase is small when compared with the very large decrease of 2,283 in other districts, which in Sind alone amounted to 1,044. The decrease in the Western is due to a falling off in the work done by the Dhulia and Násik vaccinators. In the Presidency Circle the decrease is attributable to the lesser number of re-vaccinations. In the Central there is a falling off in primary vaccinations in the towns of Bársi and Sátára and in the Southern Registration District there is a general decrease in all the towns except Kárwár. The decrease in Eastern Gujarát occurred in the cities of Broach and Ahmedabad and in Sind in the towns of Karáchi, Hyderabad and Sukkur. On the whole, taking the two operations together, there is a net decrease of 4,492. The Panvel and Nipáni Municipalities have each entertained the services of a special vaccinator. There are in all 42 vaccinators, or 2 more than last year, who worked amongst a population of 18,14,711 over an area of 114·57, square miles. They returned 56,895 primary vaccinations and 6,998 re-vaccinations, of which there were, respectively, 54,582 or 95·93, and 4,867 or 69·55 per cent. successful. The percentage of success attained is equal to 32·76 per mille of population against 35·00 last year. The total cost was Rs. 24,611 annas 7 and pies 3, equal to annas 6 and pies 7, or only 1 pie more than in the preceding year, per each successful case. The unsuccessful and unknown were, respectively, 1,584 and 1,382 and 979 and 1,157 under each kind of operation. There were 653 secondary operations, and in 5 cases the re-vaccinations were repeated. Each vaccinator, on an average, operated on 1,521 persons. Vaccination is carried on by the dispensary medical officers in those towns where there are no vaccinators, and the rural vaccinator performs the work where there is no dispensary. Correspondence with the Collectors on the subject of entertaining special vaccinators in all towns having a population of 10,000 is still pending.

Necessity for Special Vaccinators in Towns having a population of 10,000.

Districts.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.
Western Registration District	79,576	84,649	5,073	..	1,332	1,317	..	15	80,908	85,966	5,058	..
Central Registration District	1,28,271	127,135	..	1,136	1,994	1,499	..	495	130,265	128,634	..	1,631
Southern Registration District	79,792	80,949	1,157	..	3,114	2,922	..	192	82,906	83,871	965	..
Eastern Gujarát Registration District ..	81,090	78,037	..	3,053	6,492	1,777	..	4,715	87,582	79,814	..	7,768
Sind Registration District	72,451	70,570	..	1,881	17,395	15,644	..	1,751	89,846	86,214	..	3,632
Total ..	441,180	441,340	6,230	6,070	30,327	23,159	..	7,168	471,507	464,499	6,023	13,031

Work of Local Fund Vaccinators.

27. The above table shows the work of Local Fund vaccinators for each of the five registration districts. There is a decrease in primary vaccinations in all the districts except the Western and Southern of 6,070. In re-vaccinations there is a general decrease of 7,168. The decrease in the Central Registration District is partly owing to a falling off in the work performed in the Collectorates of Ahmednagar, Poona, Sholápur and Ratnágiri and in Eastern Gujarát in the Collectorates of Surat, Broach, Kaira and Panch Maháls. In Sind the decrease took place in the Collectorates of Karáchi, Hyderabad, Thar and Párkar. This year there were 255 vaccinators against 249 in the previous year, as 6 additional vaccinators, one in each of the Collectorates of Khándesh, Kolába, Kánara, Surat, Panch Maháls and Karáchi, were employed during the year. There are now only 4 vaccinators (1 in Broach and 3 in Karáchi) who have more than one rural circle to attend to. The Local Fund vaccinators worked over an area of 128,035 square miles and amongst a population of 14,716,644. They primarily vaccinated 441,340 and re-vaccinated 23,159 persons. The number primarily vaccinated successfully was 425,148 or 96·33 per cent. and those re-vaccinated successfully were 15,229, or 65·76 per cent. The rate of protection per mille of population was 29·92 against 30·41 last year. The total cost amounted to Rs. 82,473-12-4. Each successful case cost annas 3, or 2 pies more than last year. The unsuccessful in each kind of operations were, respectively, 6,158 and 4,366 and the unknown were 11,174 and 3,605. There were 1,140 secondary operations and 41 repetitions of re-vaccinations. Each vaccinator, on the average, operated on 1,822 persons.

Districts and Circles.	Persons Primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.	1883-84.	1884-85.	Increase.	Decrease.
Western Registration District .	4,303	3,178	..	1,125	18	38	20	..	4,321	3,216	..	1,105
Central Registration District ..	15,340	12,053	..	3,287	1,955	2,452	497	..	17,295	14,505	..	2,790
Southern Registration District.	44,100	39,575	..	4,525	972	1,125	153	..	45,072	40,700	..	4,372
Eastern Gujarát Registration District ..	35,342	32,274	..	3,068	249	209	..	40	35,591	32,483	..	3,108
Western Gujarát Circle ..	96,173	94,390	..	1,783	6,630	24,898	18,268	..	102,803	119,288	16,485	..
Sind Registration District ..	3,127	3,433	306	..	5	84	79	..	3,132	3,517	385	.
Baroda	66,992	64,547	..	2,445	460	283	..	177	67,452	64,830	..	2,622
Cutch	18,803	20,486	1,683	..	264	188	..	76	19,067	20,674	1,607	.
Khelát	..	258	258	..	..	4	4	..	..	262	262	.
Total ..	284,180	270,194	2,247	16,233	10,553	29,281	19,021	293	294,733	299,475	18,739	13,997

Work of Native State Vaccinators.

28. The above table shows the work of Native State vaccinators in 5 districts and 3 circles. Except in Sind and Cutch there is a general decrease in primary vaccinations amounting to 16,233. In re-vaccinations there is a decrease of only 293 in Eastern Gujarát, Baroda and Cutch. This decrease is much lower than the increase, which amounts to 19,021. There is an increase of 18,739 in total operations

in Sind, Western Gujarát and Cutch and a decrease of 13,997 in the remainder. The decrease in the Western and Central Registration Districts took place in all the States, whilst in the Southern it occurred in almost all the States except Shirhatti, Mangalvedha, Lakshmeshvar, Kurundvád, Mudhol, Sávanúr, Vishálgad, Ajre and Torgal. In Eastern Gujarát the States of Katosan, Náni Márwár, Rájpipla, Sunth and Chhota Udepur show but a small increase when compared with the decrease in other States. There were 152 vaccinators, or 6 more than last year. The States of Sávantvádi, Sángli, Gudgeri, Kolhápur, Dharampor and Káthiáwár have each entertained the services of an additional vaccinator during the year. They worked over an area of 75,865 square miles and amongst a population of 8,917,804. The numbers primarily vaccinated were 270,194, and 29,281 were re-vaccinated. Of these 253,942 and 18,633 respectively, or 93·99 and 63·64 per cent., were successful. The unsuccessful and unknown in primary vaccinations were 9,285 and 7,954 and 7,421 and 3,244 in re-vaccinations. There were 987 secondary operations, and 17 repetitions of re-vaccinations. Out of every 1,000 of population 30·57 were successfully operated on against 30·84 last year. The total cost amounted to Rs. 54,848-13-1. This gives annas 3-3 per each successful case, or 3 pies more than last year. The average number of persons operated on by each vaccinator was 1,970. Additional vaccinators are required for each of the States of Gad Hinglaj, Panhála, Lúnáváda, Sunth, Kadána, Pálanpur (2), and Khairpur.

States that require additional Vaccinators.

29. There were 160 dispensaries, or the same as in the preceding year, in which vaccination was carried on. The following table shows the progress of vaccination in dispensaries by each district and circle :—

Work of Dispensary Officers.

Districts and Circles.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1883-84.	1884-85.	In-crease.	De-crease.	1883-84.	1884-85.	In-crease.	De-crease.	1883-84.	1884-85.	In-crease	De-crease.
Western Registration District ..	4,802	4,861	59	..	113	120	7	..	4,915	4,981	66	..
Presidency Circle	..	..	..	..	371	185	..	186	371	185	..	186
Central Registration District ..	4,097	3,641	.	456	196	42	..	154	4,293	3,683	..	610
Southern Registration District ..	8,805	6,083	..	2,722	995	560	..	435	9,800	6,643	.	3,157
Eastern Gujarát Registration District	3,087	2,841	..	246	54	87	33	..	3,141	2,928	..	213
Western Gujarát Circle	2,612	2,457	..	155	524	498	..	26	3,136	2,955	.	181
Sind Registration District ..	2,227	1,577	..	650	264	284	20	..	2,491	1,861	..	630
Baroda	3,736	2,264	..	1,472	6	..	..	6	3,742	2,264	..	1,478
Shaik Othman, Bushire, and Muskat	620	290	..	330	2	4	2	..	622	294	..	328
Total ..	29,986	24,014	59	6,031	2,525	1,780	62	807	32,511	25,794	66	6,783

A decrease amounting to 6,031 is observed in all the districts but the Western in primary vaccinations. The decrease in the Central is owing to a falling off in the amount of work done in the Collectorates of Sátára and Ratnágiri. In the Southern the decrease occurred in almost all the dispensaries. In Eastern Gujarát it is attributable also to the same cause in the Collectorates of Broach and Panch Mahále and in Sádra. In Western Gujarát less work was performed in the dispensaries at Limbdi, Gondal, Sarsai, Dasáda and Jinjhúváda. In Sind it is owing to a falling off in the work done in the Collectorates of Karáchi, Hyderabad, Thar and Párkar and Upper Sind Frontier, whilst in Gwádur no vaccinations were performed during the year. The decrease in Baroda, Shaikh Othman, Bushire and Muskat is considerable. In the Presidency Circle there were no primary vaccinations performed at any of the dispensaries during this as well as during the previous year. In re-vaccinations there is an increase of only 62 in Western, Eastern Gujarát and Sind Registration Districts, and a decrease of 807 in the other districts. On the whole there is a net decrease of 6,717 over the work of last year. There were 24,014 persons primarily vaccinated and 1,780 re-vaccinated. The respective numbers of successful cases were 21,626 and 1,159. The percentages of success were 90·06 and 65·11

against 91·51 and 54·69 in 1883-84. The unsuccessful and unknown were 1,476 and 989 in primary vaccinations, and 559 and 62 in re-vaccinations. The number of secondary operations was 77. No person was re-vaccinated more than once.

Work performed in the Army generally.

30. The following table shows details of vaccination in the Army generally and amongst camp followers :—

		PRIMARY VACCINATIONS.																
		1		2					3			4					5	6
		Sex.		Caste.					Age.			Results.						
												Successful.			Unsuccessful and doubtful.	Unknown.		
		Males.	Females.	Christians.	Hindus.	Mussalmans.	Parsis.	Other Castes.	Under 1 year.	Between 1 and 6 years.	Above 6 years.	Under 1 year.	Above 1 and 6 years.	Total of all Ages.			Total.	Excess of Operations over Persons.
British Army.																		
Regiments..	1883-84 ..	111	78	164	23	2	..	..	178	16	1	166	9	176	13	1	190	1
	1884-85 ..	74	63	137	..	..	..	..	134	3	..	124	3	127	9	1	137	..
Camp Followers.	1883-84 ..	156	152	13	215	53	1	26	258	33	17	240	33	290	18	..	308	..
	1884-85 ..	97	94	8	159	13	2	15	143	26	22	132	26	178	13	..	191	..
Total..	1883-84 ..	267	230	177	238	55	1	26	436	45	18	406	42	466	31	1	498	1
	1884-85 ..	171	157	145	153	13	2	15	277	29	22	256	29	305	22	1	328	..
Native Army.																		
Regiments..	1883-84 ..	807	554	54	885	341	..	81	917	276	168	840	240	1,207	161	11	1,379	18
	1884-85 ..	624	605	31	775	375	2	46	871	198	160	819	145	1,082	142	7	1,231	2
Camp Followers.	1883-84 ..	1,245	1,092	31	1,248	667	13	378	2,124	196	17	1,780	126	1,921	284	133	2,338	1
	1884-85 ..	1,297	1,028	28	1,156	747	9	385	1,961	211	153	1,782	155	2,089	228	58	2,325	..
Total..	1883-84 ..	2,052	1,646	85	2,133	1,008	13	459	3,041	472	185	2,620	366	3,128	445	144	3,717	19
	1884-85 ..	1,921	1,633	59	1,931	1,122	11	431	2,832	409	313	2,601	300	3,121	370	65	3,556	2

		RE-VACCINATIONS.							PERCENTAGES OF SUCCESSFUL CASES.	
		7		8			9	10	11	
		Sex.		Results.						
		Males.	Females.	Succesful.	Unsuccessful and doubtful.	Unknown.	Total.	Excess of Operations over Persons.	In Primary Vaccinations.	In Re-vaccinations.
British Army.										
Regiments ...	1883-84 ...	682	100	448	342	...	790	8	93·12	57·29
	1884-85 ...	85	5	65	24	1	90	...	92·77	72·22
Camp Followers.	1883-84 ...	178	49	171	56	...	227	...	94·16	75·33
	1884-85 ...	50	7	49	8	...	57	...	93·19	85·96
Total ...	1883-84 ...	860	149	619	398	...	1,017	8	93·76	61·35
	1884-85 ...	135	12	114	32	1	147	...	92·99	77·55
Native Army.										
Regiments ...	1883-84 ...	2,249	356	1,412	1,197	7	2,616	11	88·68	54·20
	1884-85 ..	1,010	204	730	477	7	1,214	...	88·04	60·13
Camp Followers.	1883-84 ...	181	60	155	83	3	241	...	82·20	64·32
	1884-85 ...	143	78	124	93	4	221	...	87·70	56·11
Total ...	1883-84 ...	2,430	416	1,567	1,280	10	2,857	11	84·59	55·06
	1884-85 ...	1,153	282	854	570	11	1,435	...	87·82	59·51

European Troops.

31. Amongst European troops the number of persons primarily vaccinated was 328, and in 305 cases, or 92·99 per cent., the operation was successful. The unsuccessful and unknown cases amounted to 22 and 1 respectively: there were no secondary operations. The re-vaccinations were 147, of which 1·14 or 77·55, were successful, whilst 32 were unsuccessful: there was only one unknown case. No person

was re-vaccinated more than once. Last year there were 497 persons primarily vaccinated and 1,009 were re-vaccinated, so there is a decrease of 1,031 persons.

Native Troops.

32. In the Native Army the primarily vaccinated numbered 3,554 and the re-vaccinated 1,435 against 3,698 and 2,846 in 1883-84. In primary vaccinations there is a decrease of 144, and in re-vaccinations of 1,411. The decrease is owing to there being very few cases that were left unprotected last year. The number of persons primarily vaccinated successfully was 312, or 87·82 per cent. In re-vaccinations there were 854, or 59·51 per cent., successful. The unsuccessful and unknown cases numbered respectively 370 and 65 in primary vaccinations, and 570 and 11 in re-vaccinations. Secondary operations were only 2 and no person was re-vaccinated more than once. The work performed by vaccinators in the military stations of Mhow, Neemuch and Nasirabad is included, as usual, in that for Camp Followers.

Average Number of Operations per each kind of Establishment.

33. The average number of persons operated on by different establishments is specified below for the years 1884-85 and 1883-84 :—

No.	Establishments.	Average Number of Persons operated on.	
		1883-84.	1884-85.
1	2 Government Vaccinators	3,468	2,324
2	42 Municipal do.	1,753	1,521
3	2 Cantonment do.	1,717	897
4	255 Local Fund do.	1,894	1,822
5	152 Native State do.	2,019	1,970
6	453 For the whole Presidency	1,930	1,842

There is a decrease under all establishments, owing to there being more vaccinators employed this year than in the year 1883-84.

Average Number of Operations per Vaccinator by Districts and Circles.

34. The subjoined table indicates the averages by districts and circles :—

No.	Districts and Circles.	Average Number of Persons vaccinated by each Vaccinator.		Names of Deputy Sanitary Commissioners and Superintendents.
		1883-84.	1884-85.	
1	Western Gujarát Circle ...	2,552	2,817	Dr. E. Tully.
2	Presidency Circle	2,271	2,255	Drs. Ananta Chandroba and Sakhárám Arjun.
3	Baroda Circle	2,176	2,091	Dr. Bhálchandra Krishna.
4	Central Registration District ...	2,096	2,013	Drs. J. Parker, H. Cook and C. W. MacRury.
5	Eastern Gujarát Registration District.	2,099	1,838	Dr. M. B. Colah.
6	Sind Registration District ...	1,820	1,682	Drs. J. C. H. Peacocke, C. W. MacRury and J. Parker.
7	Southern Registration District.	1,792	1,613	Dr. C. H. Channer.
8	Western Registration District .	1,458	1,428	Drs. J. W. Clarkson, K. R. Kirtikar and J. C. H. Peacocke.
9	Cutch Circle	1,122	1,216	Dr. Dorábji Hormasji.
10	Aden	585	412	Dr. Charles Monks.
	Average for the whole Presidency.	1,930	1,842	

The averages are above those of last year in Western Gujarát and Cutch. Eastern Gujarát, Sind, Southern, Western, Cutch and Aden are below the average for the whole Presidency. Western Gujarát stands first like last

year, and the Central has risen from the 5th to the 4th place; whilst Eastern Gujarát has fallen from the 4th to the 5th place. The seven others—Western, Presidency Circle, Southern, Sind, Baroda, Cutch and Aden—hold the same places as last year.

English Lymph.

35. The subjoined statement shows the result of the English lymph received during the year:—

Supplies received in	No. on the Packet.	Districts and Circles.	Number of: Tubes received and tested.	Number of: Children operated on.	Number of: Insertions.	Number of: Resulting Vesicles.	Character of Vesicles.	Remarks.
November 1884.	52	Western Registration District..	6	6	18	..	.. ..	Total Failure.
	55	Central Registration District ..	6	6	31	19	Fair	
	57	Southern Registration District ..	6	6	36	4	Size of pulse ..	
	59	Eastern Gujarát Registration District.	6	6	28	10	Middling	
	59	Western Gujarát Circle.. ..	6	5	30	6	Small	
	64	Sind Registration District ..	7	6	33	..	....	Total failure. One tube broken in transit.
	53	Baroda	4	4	23	1	Good..	
	53	Cutch	4	4	16	6	Middling	Failure in two tubes.
		Total ..	45	43	215	45		
January 1885.	317, 918	Western Registration District..	6	6	1	15	Good..	
	375	Central Registration District ..	6	8	42	21	Large	Lymph was pure. Eight children were vaccinated with the lymph from four vesicles.
	375, 464	Southern Registration District .	6	6	36	14	Middling	
	464, 960	Eastern Gujarát Registration District.	6	6	24	12	3 Small and good and 9 middling good.	Thirteen children were vaccinated with the lymph from these vesicles. Failure in one tube.
	900	Western Gujarát Circle ..	6	5	30	10	Large	One tube was empty. Lymph good.
	150	Sind Registration District ..	7	7	43	24	12 good and 12 middling.	Failure in one tube.
	906	Baroda	4	4	24	4	Good and characteristic.	
	100, 168	Cutch	4	4	16	2	Good..	Failure in three tubes.
		Total ..	45	46	233	102		
	Reserved	Aden	6	6	18	..	....	
	May ..		6	6	18	..	....	
	Sept. .. 1885.		6	6	18	1	Good..	
	Jany. ..		6	6	18	..	....	
	March..		6	..	..	..	....	Kept in reserve.
		Total ..	30	24	72	1		
		Grand Total ..	120	113	520	148		

There were 9 separate consignments, 2 of 45 tubes each, for the Bombay District and 4 for Aden, where English lymph is now sent direct. The first Bombay consignment was not as successful as the second, as it proved ineffectual in the Western and Sind Registration Districts. In Aden the twenty-four tubes produced only one good vesicle out of 72 insertions on the arms of 24 children.

Quality of the Lymph in use.

36. The quality of the lymph in use was throughout good.

Lymph supplied.

37. During the year lymph was supplied to the Civil Administrative Medical Officer for Central India, Indore, from the Deputy Sanitary Commissioner of the Western R. D.; to the Medical Officers, 1st and 3rd N. I., 4th Cavalry, H. E. the Governor's Body Guard, Agency Surgeon Sehore, Civil Surgeons, Unao and Gonda Oude, Station Hospital, Ahmedabad, and Sanitary Commissioner, Assam, from the Deputy Sanitary Commissioner of the Central R. D.; to the Medical Officers, Western Rájputána States, Jodhpur, Mhow, Neemuch and Nasirabad from the Deputy Sanitary Commissioner of the Eastern Gujarát; to the several Military and Civil Medical Officers from Western Gujarát; and to the Medical Officers, British Troops, Quetta, 14th, 17th and 26th N. I., 2nd Sind Horse, and Residency Surgeon, Quetta, from Sind.

Animal Vaccination.

38. Animal vaccination was carried on in Bombay, Poona City and Cantonment, Broach, and Kaira Collectorates and Jámnagar. In Western Gujarát animal vaccination was carried on in Jámnagar before the cold weather tour by Mr. Sardármiya Nánámiya, the 2nd Class Assistant Superintendent of Vaccination, who inoculated

9 heifers successfully at a cost of Rs. 30-8-1 and the lymph was distributed among the vaccinators.

The annexed table shows the number of heifers inoculated and the monthly result of the operations in Bombay and Poona where animal lymph was kept up throughout the year :—

Months.	Poona City.			Poona Cantonment.			Bombay.			Total.		
	Heifers inoculated.	Successful.	Unsuccessful.	Heifers inoculated.	Successful.	Unsuccessful.	Heifers inoculated.	Successful.	Unsuccessful.	Heifers inoculated.	Successful.	Unsuccessful.
April 1884..	4	4	..	7	7	..	43	41	2	54	52	2
May..	4	4	..	7	7	..	44	43	1	55	54	1
June	5	5	..	6	3	3	40	38	2	51	46	5
July	4	4	..	7	7	..	41	35	6	52	46	6
August	4	3	1	5	5	..	44	40	4	53	48	5
September	4	4	..	4	3	1	42	35	7	50	42	8
October	5	5	..	5	5	..	40	40	..	50	50	..
November..	4	3	1	4	4	..	39	36	3	47	43	4
December..	4	4	..	5	5	..	42	39	3	51	48	3
January 1885	5	5	..	8	8	..	39	34	5	52	47	5
February	4	4	..	7	7	..	36	36	..	47	47	..
March	4	4	..	7	6	1	42	42	..	53	52	1
Total ..	51	49	2	72	67	5	492	450	33	615	575	40

In Poona 49 out of 51 heifers were successfully inoculated. Their cost was Rs. 140-10-0 against Rs. 144-7-6 last year. In Poona Cantonment 67 out of 72 heifers were successfully inoculated at a cost of Rs. 227-8-0 against Rs. 199-12-0 in 1883-84.

In Bombay 492 heifers were inoculated against 545 during the preceding year. On 33 heifers the operations proved unsuccessful. The total cost was Rs. 4,801-2-11, whilst last year it was Rs. 6,126-10-11.

The subjoined table shows the details of the work of animal vaccination carried on in the Collectorates of Broach and Kaira :—

Collectorates, and Ta'lukas.	No. of Villages in which Animal Vaccination was carried on.	Heifers inoculated.			Vaccinations performed from Heifer Lymph.								Extra Expenditure incurred on Animal Vaccination.	During what Months Heifer Vaccination was carried on.
					Primary Vaccinations.				Re-vaccinations.					
		Successful.	Unsuccessful.	Total.	Successful.	Unsuccessful.	Unknown.	Total.	Successful.	Unsuccessful.	Unknown.	Total.		
Broach Collectorate.													Rs. a. p.	
Broach R. C. ..	67	78	1	79	1,103	57	46	1,266	..	..	..	..	21 12 3	From July 1884 to March 1885.
Anklesvar „ ..	89	164	2	166	1,579	131	14	1,724	44	34	9	87	47 10 3	May 1884 to March 1885.
Total ..	156	242	3	245	2,742	188	60	2,990	44	34	9	87	69 6 6	
Kaira Collectorate.														
Nadiád R. C. ..	7	12	2	14	100	35	4	139	1	..	..	1	1 4 3	January and February 1885.
Borsad „ ..	31	103	44	147	1,327	9	..	1,336	18	17	..	35	5 1 11	April to July 1884 and January to March 1885.
A'nand „ ..	5	13	3	16	347	12	5	352	8	3	..	11	1 9 3	January to March 1885.
Total ..	43	128	49	177	1,774	44	9	1,827	27	20	..	47	8 15 6	
Grand Total ..	199	370	52	422	4,516	232	69	4,817	71	54	9	134	78 5 11	

Except in Bombay, where animal lymph only is used and in Poona, Broach, Nadiád, Anklesvar, Borsad, A'nand and Jámnagar where both animal and human lymph were in use, vaccination in all other places was carried on from arm to arm and with human lymph. Vaccination with animal lymph was also carried on in Bándra. The total number of heifers inoculated was 1,046 against 935 last year; in 92 the virus did not take : the total cost was Rs. 5,278-2-11 against Rs. 6,659-2-10 last year.

39. The total expenditure on account of vaccination is shown in the following table :—

Expenditure.

Establishment.	Total Expenditure. 1883-84.	Total Expenditure. 1884-85.	Compared with the preceding year. +Increase. —Decrease.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Provincial...	1,11,770 9 1	1,16,994 2 7	+5,223 9 6
Municipal...	25,710 1 11	24,611 7 3	—1,098 10 8
Cantonment	804 4 6	775 11 6	—28 9 0
Local Fund	78,842 1 6	82,473 12 4	+3,631 10 10
Native State	52,611 8 0	54,848 13 1	+2,237 5 1
Total ...	2,69,738 9 0	2,79,703 14 9	+11,092 9 5
			—1,127 3 8
			+9,965 5 9

The increase under "Provincial" is owing to the higher rates of pay drawn by the Deputy Sanitary Commissioners Central and Sind Registration Districts, as well as to travelling expenses. The increase under "Local Funds" and "Native States" is due to the entertainment of additional vaccinators and peons.

Cost of each successful case, including all charges.

40. The total cost for the whole Presidency, including all charges, was Rs. 2,79,703-14-9, whilst the successful cases, excluding dispensaries and the army, amounted to 778,277. The average cost per each successful case was annas 5-9 or 4 pies more than last year.

Cost of each successful case, after deducting the pay of the Supervising Officers by Districts and Circles.

41. The total cost and the cost per each successful case, after deducting the pay of the Deputy Sanitary Commissioners and Superintendents, is shown in the following table by districts and circles compared with that for 1883-84 :—

Names of Districts and Circles.		Deputy Sanitary Commissioners and Superintendents.	Successfully Vaccinated and re-vaccinated.	Total Cost, excluding the Pay of Deputy Sanitary Commissioners and Superintendents.	Average Cost of each Successful Vaccination.	Number of Vaccinators.
				Rs. a. p.	Rs. a. p.	
Western Registration District ..	1883-84..	Drs. J. W. Clarkson, K. R. Kirtikar, and J. C. H. Peacocke.	86,493	29,004 2 3	0 5 4	61
	1884-85..		90,670	28,812 11 0	0 5 1	65
Presidency Circle	1883-84..	Drs. Ananta Chandroba and Sakhárám Arjun.	16,982	15,756 5 9	0 14 10	9
	1884-85..		17,340	13,813 6 11	0 12 9	9
Central Registration District ..	1883-84..	Drs. J. Parker, H. Cook and C. W. MacRury.	155,559	35,048 14 2	0 3 7	77
	1884-85..		149,950	36,433 3 5	0 3 11	78
Southern Registration District ..	1883-84.	Dr. O. H. Channer	130,268	34,740 8 8	0 4 3	77
	1884-85..		124,243	38,340 15 4	0 4 11	82
Eastern Gujarát Registration District.	1883-84..	Dr. M. B. Colah	127,185	28,686 12 2	0 3 7	64
	1884-85..		118,496	29,633 10 7	0 4 0	67
Western Gujarát Circle	1883-84..	Dr. E. Tully	99,018	21,347 10 11	0 3 5	43
	1884-85..		105,119	22,416 7 5	0 3 6	44
Sind Registration District ..	1883-84..	Drs. J. C. H. Peacocke, C. W. MacRury and J. Parker.	94,693	30,905 6 7	0 5 2	58
	1884-85..		89,516	31,622 2 10	0 5 8	60
Baroda	1883-84..	Dr. Bhálchandra Krishna	64,876	11,013 5 11	0 2 11	31
	1884-85..		61,830	12,055 7 5	0 3 1	31
Cutch..	1883-84..	Dr. Dorábji Hormasji	18,869	6,786 5 9	0 5 9	17
	1884-85..		20,485	6,670 7 10	0 5 3	17
Aden	1883-84..	Dr. Charles Monks	427	425 0 0	0 15 11	1
	1884-85..		328	414 1 9	1 4 2	1
		Total .. 1883-84..	794,380	214,294 8 2	0 4 4	438
		Total .. 1884-85..	778,277	220,232 10 6	0 4 6	454

The cost per each successful case was less than last year in the Western, Presidency Circle and Cutch. The total cost was Rs. 2,20,232-10-6, which, when divided amonst 778,277 successful cases, amounts to annas 4-6, or 2 pies more than for the previous year.

Work of Deputy Sanitary Commissioners and Superintendents of Vaccination.

42. The inspectorial work performed by the supervising officers is shown in the following table :—

Names of Districts and Circles.		Names of Deputy Sanitary Commissioners and Superintendents.	Number of Encampments.	Number of Travelling Days.	Distance travelled in Miles.	Number of Villages visited.	Number of Vaccinated Children inspected.
Western Registration District ..	1883-84..	Drs. J. W. Clarkson, K. R. Kirtikar and J. C. H. Peacocke.	19	87	1,409	24	1,757
	1884-85..		38	150	4,233	167	6,412
Central Registration District ..	1883-84..	Drs. J. Parker, H. Cook and C. W. MacRury.	66	211	2,654¾	276	13,270
	1884-85..		51	127	1,955	247	8,699
Southern Registration District..	1883-84..	Dr. O. H. Channer	72	165	1,976¼	194	9,785
	1884-85..		75	154	2,633½	167	5,887
Eastern Gujarát Registration District.	1883-84..	Dr. M. B. Colah	52	173	2,309	409	8,970
	1884-85..		49	157	2,505	331	9,736
Western Gujarát Circle	1883-84..	Dr. E. Tully	54	90	1,003	180	34,188
	1884-85..		42	97	1,627	170	23,841
Sind Registration District ..	1883-84..	Drs. J. C. H. Peacocke, C. W. MacRury and J. Parker.	57	80	2,406	322	16,089
	1884-85..		51	132	2,684	295	7,653
Total ..	1883-84..		320	806	11,758½	1,404	84,059
	1884-85..		306	817	15,637½	1,377	62,258

In Western Gujarát 23,841, children were inspected by Dr. Tully against 34,188 last year ; 22,711 of these were inspected without the test of calling their names from the register ; next to it is Eastern Gujarát, in which the number inspected amounted to 9,736 against 8,970 in 1883-84 ; the least number inspected was in the Southern, in which only 5,887 children were inspected against 9,785 in 1883-84. For the Presidency the total number of children inspected is less than last year by 21,801 :—

Districts and Circles.		Work tested by calling Names from Registers.											
		Number of Vaccinated Children inspected.	Present during Inspection.				Absent during Inspection.		Number of Persons whom the Vaccinator has returned as vaccinated.				
			Successful.			Unsuccessful.	Absence accounted for.	Absence unaccounted for.	Successful.	Unsuccessful and doubtful.	Unknown.	Total.	Excess of Operations over Persons.
			Good.	Middling.	Bad.								
Western Registration District.	1883-84.	1,353	662	479	178	34	1,032	..	2,291	72	22	2,385	..
	1884-85.	4,949	3,044	868	792	245	2,027	...	7,273	210	97	7,580	4
Central Registration District ..	1883-84.	11,671	8,117	2,279	942	833	9,647	..	20,623	411	291	21,325	7
	1884-85.	7,924	6,703	564	483	174	5,393	..	12,899	198	231	13,328	11
Southern Registration District.	1883-84.	6,258	5,106	725	321	106	3,925	1	9,684	154	347	10,185	1
	1884-85.	4,238	2,827	875	399	137	3,124	..	6,878	235	249	7,562	..
Eastern Gujarát Registration District.	1883-84.	8,970	5,094	2,608	1,055	212	1,435	2	10,126	176	125	10,427	20
	1884-85.	9,736	5,784	2,543	1,015	394	2,476	1	11,651	434	163	12,248	35
Western Gujarát Circle. ..	1883-84.	2,106	365	627	913	196	845	..	2,763	103	90	2,956	5
	1884-85.	1,130	302	340	424	64	566	..	1,437	118	141	1,696	..
Sind Registration District ..	1883-84.	3,376	1,713	957	596	109	1,990	1	4,836	284	293	5,413	88
	1884-85.	4,452	1,623	1,206	1,357	266	2,553	..	6,176	459	385	7,020	15
Total ..	1883-84.	23,733	21,057	7,676	4,011	990	18,883	4	50,323	1,200	1,168	52,691	71
	1884-85.	32,429	20,233	6,396	4,470	1,280	16,739	1	46,314	1,654	1,266	49,234	65

Inspections from Vaccination Registers.

43. It will be seen from the above table that for 62,258 children the results in 32,429 instances were tested by calling their names from registers, in which there were enrolled the names of 49,169 children, of whom 65 were

vaccinated more than once on account of the failure of the first operation. The results given by vaccinators were 46,314 as successful, 1,654 unsuccessful, exclusive of 65 secondary operations, and 1,266 unknown; while on inspection they were found to be 31,149, 1,280 and 16,740. Excluding the "unknown," or rather the number of children "absent" at the time of inspection, from both sides, the vaccinators' figures give the percentages of 96·55 as successful and 3·45 as unsuccessful, while the inspection figures give them as 96·05 and 3·95. This test shows that the result noted by vaccinators is more by only 0·50 per cent. Again, out of 31,149 or 96·05 successful children there were 20,283 or 62·55 who had "good" cicatrices on their arms, 6,396 or 19·72 "middling", and 4,470 or 13·78 "bad." These results show the degree of protection afforded. The greatest number of inspections was in the Eastern Gujarát and Western Registration District, whilst the least was in Western Gujarát. The number of children whose arms were inspected without the register test was 29,829 of whom 22,711 were in the Western Gujarát, 3,231 in Sind, and 1,649 in the Southern, whilst in the Western they were 1,463 and in the Central only 775. In Eastern Gujarát no inspections were held without the register test.

Truthfulness of Vaccination Registers.

Classification of successful cases.

Inspections without Vaccination Registers.

44. All the supervising officers have worked zealously and conscientiously throughout the year and have given me every assistance.

Remarks on the work of the Supervising Officers.

45. The work of Inspectors and Assistant Superintendents of Vaccination is detailed by districts and circles in the table subjoined:—

Work of Inspectors and Assistant Superintendents.

Districts and Circles.		Number of Encampments.	Number of travelling Days.	Distance travelled in Miles.	Number of Villages visited.	Work tested by calling names from Registers. Number of vaccinated Children inspected.	Present during Inspection. Successful. Character of Vesicles and Cicatrices. Good.	Middling.	Bad.	Unsuccessful.	Absent during Inspection. Absence accounted for.	Absence unaccounted for.	Number of Persons whom the Vaccinator has returned as vaccinated. Successful.	Unsuccessful and doubtful.	Unknown.	Total.	Excess of Operations over Persons.
Western Registration District.	1883-84.	662	1,264	9,762	1,446	36,880	27,773	4,323	3,160	1,624	13,475	6	49,023	768	643	50,439	78
	1884-85.	491	948	9,784	1,165	32,604	23,846	3,897	3,366	1,585	12,902	39	44,735	427	433	45,600	55
Central Registration District.	1883-84.	739	1,589	12,456	1,431	52,019	38,944	9,608	2,110	1,357	15,790	8	65,378	722	1,768	67,868	51
	1884-85.	696	1,689	11,876	1,555	51,088	36,786	8,647	3,821	1,834	17,767	..	65,912	932	2,094	68,938	83
Southern Registration District.	1883-84.	559	1,067	9,922½	1,237	43,007	32,862	6,305	2,864	976	17,433	49	58,201	820	1,483	60,504	15
	1884-85.	743	1,134	10,869½	1,342	45,997	35,419	6,489	2,769	1,330	18,619	..	61,576	1,122	1,943	64,641	25
Eastern Gujarát Registration District.	1883-84.	298	946	10,884	1,834	41,196	26,166	10,635	3,008	1,387	8,633	3	46,900	1,810	1,349	50,059	227
	1884-85.	354	913	10,289	2,045	39,988	26,955	9,440	2,571	1,022	8,504	1	46,590	1,141	966	48,697	204
Western Gujarát Circle.	1883-84.	154	320	3,404	586	16,947	9,141	3,801	3,134	871	5,555	..	20,504	1,071	960	22,535	33
	1884-85.	130	266	2,914	422	18,890	10,063	4,287	2,798	1,652	6,061	..	21,218	2,321	1,347	24,886	25
Sind Registration District.	1883-84.	563	1,012	14,752	3,103	37,430	12,319	11,862	10,004	3,245	19,051	..	47,000	6,359	3,272	56,631	150
	1884-85.	679	1,178	15,864	2,839	34,763	10,812	11,018	9,594	3,339	18,851	12	47,070	2,751	3,945	53,766	140
Cutch ..	1883-84.	186	249	1,716	488	14,740	12,965	186	893	696	2,829	23	17,299	357	34	17,690	98
	1884-85.	181	247	1,622	476	14,376	12,890	73	834	579	1,986	44	16,294	168	23	16,485	79
Baroda ..	1883-84.	936	983	7,161	1,410	33,993	26,264	4,884	2,249	596	5,087	9	37,599	798	662	39,039	70
	1884-85.	966	971	8,220	1,488	32,885	25,705	4,432	1,991	757	6,051	..	37,247	1,029	769	39,045	109
Total ..	1883-84.	4,097	7,430	70,127¾	11,585	276,212	186,434	51,604	27,422	10,752	87,859	98	341,904	12,705	10,176	3,64,785	722
	1884-85.	4,240	7,246	71,438½	11,332	270,501	187,476	49,193	27,734	12,098	90,741	96	340,642	9,891	11,525	3,62,058	729

Thirty-one Inspectors and 4 Assistant Superintendents were on travelling duty. Of this number 27 Inspectors and 2 Assistant Superintendents were paid by Government, and the remainder by Native States. The names of 361,338 children were called from the registers, of whom 270,501 were present, 90,741 were absent

but their absence was accounted for, whilst 96 had migrated. Out of 270,501 children inspected, 258,403, or 95·53 per cent., were protected, and in 12,098 cases, or 4·47 per cent., the operation was unsuccessful. Again out of 258,403, or 95·53 per cent. successful cases, 186,434 or 67·46 per 100 had "good" cicatrices, 48,193 or 17·82 "middling", and 27,734 or 10·25 "bad". In the registers tested, the results were entered as 340,642 successful, 9,891 unsuccessful, 11,525 unknown or absent, and 720 secondary operations. Excluding the unknown and secondary operations from calculation, and comparing these results with the number inspected, the percentages of successful and unsuccessful cases are respectively 97·38 and 2·62. This shows that the results recorded by the vaccinators are approximately correct. The rate of travelling was quicker than last year in the Western, Central, Western Gujarát and Baroda, and the number of villages seen was greater in Central, Southern, Eastern Gujarát and Baroda. The greatest number of villages seen was in Sind. The number of children inspected was greater in Southern and Western Gujarát. One Inspector from the Central was transferred to the Southern Registration District. One Inspector in Eastern Gujarát retired on pension. There was 1 death in the Western Registration District. The conduct of the inspecting officers, with one or two exceptions, was reported as good and satisfactory.

Their conduct.

46. Taking the work of all the Deputy Sanitary Commissioners, Superintendents, Assistant Superintendents and Inspectors together, there were 4,546 encampments, 87,076 miles travelled in 8,063 days, and 332,759 children inspected in 12,709 villages. Out of every 100 persons operated on, 38·44 were this year inspected against 40·76 in the preceding year.

Total Inspections.

47. Four vaccinators were dismissed the service—2 in the Southern, (1 by the Miraj State and 1 in Dhárwár for neglect of duty and disobedience of orders); 1 in Western Gujarát for misconduct, and 1 in Cutch for falsifications. Two candidate vaccinators—one in the Central and one in Sind—were dismissed the service for bad work. One vaccinator in Sind was suspended for misconduct. Two vaccinators—one in the Central and one in the Southern Registration District—were degraded. One vaccinator died. One vaccinator and 4 candidate vaccinators resigned the service. Three vaccinators retired. Seventeen vaccinators and one candidate vaccinator were transferred. Fourteen vaccinators were promoted. Nine candidate vaccinators were appointed as vaccinators. There were 15 new appointments—4 vaccinators in the Western, 1 in the Central, 5 in the Southern, 3 in Eastern Gujarát, 1 in Western Gujarát and 1 in Sind. The conduct of the vaccinators generally was good.

Conduct of Vaccinators.

48. One clerk in the Eastern Gujarát Registration District resigned. Three clerks in Eastern Gujarát were promoted to higher grades. One kárkún in the Presidency Circle was dismissed the service for misconduct.

Clerks.

49. Inoculation was not practised anywhere in the districts except in Cutch. The man was immediately apprehended and the practice was put a stop to.

Inoculation.

50. No instances were reported of any other disease but cow-pox having been communicated through vaccination. In Eastern Gujarát Dr. Colah remarks that :—

Ill-effects by Vaccination.

"A widespread epidemic of a peculiar skin-affection prevailed throughout the district soon after the rainy season. It was most marked during the cold months of the year. Adults suffered from it equally with children. Many vaccinators appear to have carried on vaccination among such children. In other instances the slight irritation produced by vaccination brought on the disease. It was a dry eruption mostly furfuraceous but causing great itching and extreme discomfort. Some vaccinators did their work cautiously avoiding children suffering from this disease; others in order to make up numbers carried on vaccination in them and this led to much bad work, but I ascertained that many children healthy at the time of vaccination subsequently suffered from this disease."

Ulceration on the arms of children in the site of the vaccine vesicles and axillary abscesses came also under his frequent observation. In Western Gujarát Dr. Tully observed a few unhealthy ulcers produced by the application of filthy *muttee* and in Cutch a few eczematous eruptions were seen extending on the arms and trunk by Dr. Dorábji Hormusji.

Aid from Civil, Revenue and Political Officers.

51. The Civil, Revenue and Political officers have rendered aid, when required, to all the officers of this department.

Small-pox by Collectorates and Registration Districts.

52. The table given below shows the deaths from small-pox for the years 1883-84 and 1884-85, as well as the ages of the deceased and the number of persons successfully operated on in each district of the Bombay Presidency :—

No.	Districts and Circles.		Years.	Deaths from Small-pox. Total Deaths.	Ages. Under 1 year.	Ages. Under 12 years.	Number of Persons successfully operated on.
1	Western Registration District.	Khándesh Collectorate ...	1883-84	924	334	577	36,876
			1884-85	69	24	40	38,469
2		Násik do. ...	1883-84	601	266	325	21,921
			1884-85	422	155	198	19,886
3		Thána do. ...	1883-84	1,135	412	680	17,389
			1884-85	346	133	195	18,755
4		Kolába do. ...	1883-84	452	162	228	10,526
			1884-85	262	90	137	18,007
		Total ...	1883-84	3,112	1,174	1,810	86,712
			1884-85	1,099	402	570	95,117
5	Presidency Circle.	Bombay City	1883-84	435	202	165	17,058
			1884-85	101	38	36	17,400
6	Central Registration District.	Ahmednagar Collectorate ...	1883-84	177	81	94	27,875
			1884-85	51	26	10	26,654
7		Poona do. ...	1883-84	655	254	382	24,963
			1884-85	281	77	156	24,334
8		Sholápur do. ...	1883-84	135	31	104	26,048
			1884-85	343	126	207	25,008
9		Sátára do. ...	1883-84	759	171	264	37,118
			1884-85	823	276	326	38,204
10		Ratnágiri do. ...	1883-84	1,432	361	560	26,607
			1884-85	678	132	301	25,696
		Total ...	1883-84	3,158	898	1,404	142,611
			1884-85	2,176	637	1,000	139,896
11	Southern Registration District.	Belgaum Collectorate ...	1883-84	1,440	557	540	29,415
			1884-85	1,530	171	373	23,944
12		Dhárwár do. ...	1883-84	1,728	286	437	27,924
			1884-85	1,465	265	317	30,067
13		Kaládgi do. ...	1883-84	1,971	829	1,082	21,309
			1884-85	500	137	185	23,414
14		Kánara do. ...	1883-84	522	47	110	13,377
			1884-85	1,049	109	268	11,531
		Total ...	1883-84	5,661	1,719	2,169	92,025
			1884-85	4,544	682	1,143	88,956
15	Eastern Gujarát Registration District	Surat Collectorate	1883-84	498	137	326	17,067
			1884-85	49	18	22	17,234
16		Broach do.	1883-84	68	33	32	13,393
			1884-85	8	1	7	10,721
17		Kaira do.	1883-84	40	12	27	25,739
			1884-85	156	67	86	24,019
18		Panch Mahále do.	1883-84	70	20	46	9,848
			1884-85	35	12	16	9,236
19		Ahmedabad do.	1883-84	122	45	75	28,329
			1884-85	178	70	95	27,923
		Total ...	1883-84	798	247	506	94,376
			1884-85	426	168	226	89,133

No.	Districts and Circles.		Years.	Deaths from Small-pox. Total Deaths.	Ages. Under 1 year.	Ages. Under 12 years.	Number of Persons successfully operated on
20	Sind Registration District.	Karáchi Collectorate ...	1883-84	215	40	46	18,959
			1884-85	297	35	79	17,749
21		Hyderabad do. ...	1883-84	659	163	209	24,382
			1884-85	477	141	147	20.828
22		Thar and Párkar do. ...	1883-84	28	3	3	12,860
			1884-85	30	5	7	11,105
23		Shikárpur do. ...	1883-84	2	1	...	31,038
			1884-85	51	16	19	31,523
24		Upper Sind Frontier	1883-84	1	...	...	5,537
			1884-85	14	2	5	6,738
		Total ...	1883-84	905	207	258	93,376
			1884-85	869	199	257	87,943
		Grand Total ...	1883-84	14,069	4,447	6,312	526,158
			1884-85	9,215	2,126	3,232	518,445

Small-pox prevailed everywhere throughout the Presidency, but to the greatest extent in the Collectorates of Sholápur and Sátára in the Central, Belgaum, Dhárwár and Kánara in the Southern, Kaira and Ahmedabad in the Eastern Gujarát, and Karáchi, Thar and Párkar, Shikárpur and Upper Sind Frontier in Sind Registration District.

(*a*). In the Central the disease prevailed in epidemic form through the Collectorates of Sholápur and Sátára towards the commencement of the year. The Collector of Satára issued a circular to all his subordinates ordering them to urge parents to bring their children without delay to be vaccinated, and to represent to the adult population the necessity for re-vaccination. In the event of an outbreak of small-pox in any village daily reports were ordered to be sent in. Extra vaccinators were sanctioned to render aid to the permanent staff.

(*b*). In the Southern small-pox was present in all the Collectorates at the commencement of the year. It attained intensity during April, May, and June. Extra vaccinators were appointed and the people were warned by the Revenue authorities to get their children vaccinated.

(*c*). In Eastern Gujarát and Sind the disease was not so virulent as in the Central and Southern Registration Districts. It was most intense in the Collectorate of Kaira, where it carried off 156 persons against 40 in the preceding year.

In Western Gujarát cases of small-pox were reported to have occurred in 107 villages, 1 each in Mángrol, Jámnagar, Bhávnagar, and Talaja; 2 each in Pálitána, Bhanwad, Jáfrábad and Sihor; 3 each in Kundla, Limbdi, Khambália, and Deesa; 4 in Bilka; 5 each in Mahuva and Porbandar; 7 in Jasdan; 10 in Dhoráji; 13 in Rádhanpur; 16 in Jhinjhuváda and 23 in Sultanpur. On the whole, there were 9,215 deaths against 14,069 in 1883-84, and the number of successful operations was 5,18,445. There were 2,126 infants, 3,232 children under 12 years, and 3,857 persons of all other ages returned under small-pox deaths; last year the respective numbers were 4,447, 6,312 and 3,310. In Baroda 317 cases occurred, of whom 32 proved fatal.

Small-pox occurring after vaccination.

53. A few cases of small-pox, occurring after vaccination, were noticed by Dr. Tully in Western Gujarát in suburbs of large towns only.

In Eastern Gujarát Dr. Colah made full enquiries on the subject. He says:—

"During the year I received from the vaccinators nominal returns of small-pox cases occurring in villages in their charge. A record of 2,459 cases occurring in 217 villages shows the following results: By castes 2,306 cases occurred among Hindus, 140 among Mahomedans, and 13 among Pársis; 1,237 were males and 1,222 females. Of the total

2,459, 1,783 were among unvaccniated; in 626 instances it occurred among persons previously vaccinated of whom 297 were successfully and 329 were unsuccessfully vaccinated. In 25 instances the history of previous vaccination was doubtful and in 25 cases small-pox occurred concurrent with vaccination. Of the total 2,459 persons attacked 2,042 recovered and 417 died. Of the dead 204 were males and 213 females; 352 deaths occurred in unvaccinated persons; 13 deaths are said to have occurred in persons previously vaccinated successfully and 13 in previously unsuccessfully vaccinated persons. Of 14 deaths the previous history of vaccination is doubtful, and 8 deaths occurred from small-pox concurrent with vaccination. As regards the ages of the dead, 189 were under 1 year, 156 were of, and under 5 years of age, 33 of 5 and under 10 years, 14 of 10 and under 15 and 25 of 15 years and upwards."

Progress in the Western Registration District.

54. The Western Registration District extends over an area of 26,321·6 square miles, comprising the collectorates of Khándesh, Násik, Thána and Kolába, and the Native States of the Khándesh Agency, Jawhár and Janjira. It has a population of 3,493,821 persons. It was administered by a Deputy Sanitary Commissioner who had working under him 6 Inspectors of Sanitation and Vaccination, 2 clerks, 5 municipal, 57 local fund, 2 candidate and 2 Native State vaccinators, and 73 peons. An additional vaccinator is required for one town circle. Vaccination returns were received from 29 dispensaries. Each vaccinator, on an average, worked amongst a population of 54,591 persons and in an area of 411·3 square miles. They primarily vaccinated 91,211 and re-vaccinated 1,624 persons: last year the respective numbers were 87,493 and 1,464. There were 89,508 or 98·13 per cent. successful cases under primary vaccinations, and 1,162 or 71·55 per cent. under re-vaccinations. These together give the total rate of protection as 25·95 per mille of population, whilst last year it was 24·76. The total cost was Rs. 37,429-13-6, and the average cost per each successful case was annas 6 and pies 7, or one pie less than last year. Each vaccinator averaged 1,428 persons. The Medical Officers of 29 dispensaries returned 4,861 persons primarily vaccinated and 120 re-vaccinated against 4,802 and 113 in 1883-84. There were 1,099 deaths from small-pox, whilst last year there were 3,112.

Khándesh Collectorate.

55. In the Khándesh Collectorate there are 26 vaccinators, each of whom had, on an average, an area of 382·4 square miles and a population of 47,586 persons. The primary vaccinations amounted to 36,603, which in 35,908 instances, or 98·10 per cent., were successful; 483 persons were re-vaccinated, and in 415 cases, or 85·92 per cent., successfully. The rate of protection per mille of population was 29·36 against 28·28 in 1883-84. The total cost of vaccination was Rs. 7,385-9-8, or annas 3 and pies 3, or one pie more than last year, per each successful case. The average number of operations per each vaccinator was 1,426. The Medical Officers of 9 dispensaries attended to vaccination work, which amounted to 2,189 and 17 persons under each kind of operation. There were 69 deaths from small-pox, whilst last year there were 924.

Násik Collectorate.

56. In the Násik Collectorate there are 14 vaccinators, but another is required for the town of Yeola. The average population and area per vaccinator were respectively 55,800 persons and 424 square miles. There were 19,134 primary vaccinations and 204 re-vaccinations, of which 18,602 and 177, or 97·22 and 86·76 per cent., were successful. The rate per mille of population protected was 24·04, whilst last year it was 26·55. The total cost was Rs. 3,899-13-5, or annas 3 and pies 4, or 5 pies more than last year per each successful case. Each vaccinator vaccinated 1,381 persons. In 7 dispensaries 1,184 persons were primarily vaccinated and 2 were re-vaccinated. There were 422 deaths from small-pox against 601 in the preceding year.

Thána Collectorate.

57. The Thána Collectorate has 14 vaccinators. Each vaccinator had, on an average, a population of 57,669 persons and an area of 281·1 square miles. Those primarily vaccinated were 17,832, and those re-vaccinated were 352. The successful cases were 17,546 and 108 or 98·40 and 30·68 per cent. The rate of protection per mille of population was 21·87: last year it was 20·23. Each vaccinator vaccinated 1,299 persons. The total cost was Rs. 4,217-6-0, or annas 3-10 per each suc-

cessful case against annas 4-2 last year. In 8 dispensaries 1,165 persons were primarily vaccinated and 95 re-vaccinated. There were 346 deaths from small-pox: in the preceding year there were 1,135.

Kolába Collectorate.

58. In the Kolába Collectorate there are 9 vaccinators. Each vaccinator had, on an average, a population of 53,648 persons and an area of 200·4 square miles. There were 13,144 primary vaccinations and 547 re-vaccinations. The successful cases were 12,952 or 98·54 and 424 or 77·51 per cent. The rate of protection per 1,000 was 27·70 against 20·97 last year. The total cost was Rs. 2,568-13-7. The average cost per successful case was annas 3-1 against annas 3-8 last year. Each vaccinator vaccinated 1,521 persons. In 5 dispensaries 323 persons were primarily vaccinated, and only 6 were re-vaccinated. There were 262 deaths from small-pox against 452 in 1883-84.

Native States in the Western Registration District.

59. The States of the Khándesh Agency, Jawhár and Janjira have a collective area of 4,699 square miles and a population of 185,187 persons. Vaccination work in the States of Khándesh Agency has for the first time this year been performed by the local fund vaccinator of the Kalvan Táluka, Násik Zilla. The number of persons primarily vaccinated and re-vaccinated by the two vaccinators in the States of Jawhár and Janjira were respectively 3,178 and 38, and all the cases were successful. The protected were 25·76 per mille of population against 23·30 last year. Each vaccinator, on an average, operated on 1,608 persons. The total cost amounted to Rs. 677-4-4, and the average cost per each successful case was annas 3-4 against annas 2-7 last year. The Kalvan Táluka vaccinator in the Dáng States vaccinated 1,320 persons successfully, thus affording protection to 21·90 persons per every 1,000 of population.

Progress in the Presidency Circle.

60. The City of Bombay comprises the Presidency Circle. It has an area of 22 square miles with a population of 773,196 persons. It was administered by a Superintendent of Vaccination paid by Government, who had under his orders an Assistant Superintendent, 4 clerks, 1 head vaccinator, 6 public vaccinators, and 2 assistants, 13 kárkuns and 3 peons, all paid by the Municipality. There were 16,168 primary vaccinations and 1,874 re-vaccinations against 15,823 and 2,345 last year. The successful cases were respectively 15,608 and 1,732, or 96·54 and 92·42 per cent. The rate per mille of population protected was 22·43 against 21·96 last year. Each vaccinator vaccinated 2,255 persons. The total cost was Rs. 18,373-6-11, or Re. 1-0-11 per each successful case: last year it was Re. 1-2-9. Vaccination was practised by the Medical Officers in the House of Correction and Common Jail. They re-vaccinated 185 persons. There were 101 deaths from small-pox against 435 last year.

Progress in the Central Registration District.

61. The Central Registration District comprises the Collectorates of Ahmednagar, Poona, Sholápur, Sátára and Ratnágiri, the Native States of Akalkot, Modnimb, the Sátára Jághirs and Sávantvádi, a population of 48,58,709 and an area of 30,252·1 square miles. It was administered by a Deputy Sanitary Commissioner, who had under his orders 6 Inspectors of Sanitation and Vaccination, 2 clerks, 7 municipal, 1 cantonment, 62 local fund, 5 candidate and 8 Native State vaccinators and 89 peons. Four additional vaccinators are required for 4 town circles. Vaccinations were performed in 22 dispensaries. The area for each vaccinator was 387·85 square miles, with a population of 62,291 souls. The vaccinators returned 1,51,560 primary vaccinations and 5,427 re-vaccinations against 1,64,529, and 5,466 last year. Under each head the successful cases were respectively 1,46,435 or 96·62 per cent., and 3,515 or 64·77 per cent. There were 30·86 persons per 1,000 of population successfully operated on, whilst last year there were 32·02. The average number of vaccinations performed by each vaccinator was 2,013, and the average cost per each successful case, calculated on the total cost of Rs. 44,653-3-5, was annas 4-9: last year it was annas 4-4. In the dispensaries 3,641 persons were vaccinated and 42 were re-vaccinated. There were 2,176 deaths from small-pox against 3,158 in 1883-84.

Ahmednagar Collectorate.

62. In the Ahmednagar Collectorate there are 13 vaccinators, and the average population and area per vaccinator were respectively 57,787 persons and 512·8 square miles. There were 26,609 primary vaccinations and 200 re-vaccinations, and the successful cases were respectively 26,329 and 110, whilst the percentages of success were 98·95 and 55·00. The rate per 1,000 of protected was 35·19 against 36·06 last year. Each vaccinator vaccinated 2,062 persons. The total cost was Rs. 3,857-0-7, and the average cost for each successful case was annas 2-4, or 1 pie more than last year. The Medical Officers of 2 dispensaries primarily vaccinated 239 persons, but performed no re-vaccinations. There were 51 deaths from small-pox: last year there were 177.

Poona Collectorate.

63. In the Collectorate of Poona there are 17 vaccinators. The average population and area per vaccinator were respectively 52,978 persons and 314·6 square miles. Out of 24,222 primary vaccinations and 865 re-vaccinations, 22,968 or 94·82 and 368 or 42·54 per cent. were successful. The rate per mille of population protected was 25·91 against 26·70 last year. Each vaccinator, on an average, operated on 1,476 persons. The total cost was Rs. 5,648-15-8. This gives the average cost per each successful case as annas 3-10 against annas 3-9 last year. In 8 dispensaries 1,118 persons were primarily vaccinated and 6 were re-vaccinated. There were 281 deaths from small-pox: last year there were 655.

Sholápur Collectorate

64. In the Sholápur Collectorate there are 12 vaccinators, each of whom had, on an average, an area of 376·8 square miles and a population of 48,541 persons. There were 24,943 primary vaccinations and 483 re-vaccinations; of these 24,372 and 382 or 97·71 and 79·09, were successful. The rate per mille of population protected was 42·50 against 44·38 in 1883-84. Each vaccinator vaccinated 2,119 persons. The total cost was Rs. 3,724-2-8, which gives annas 2-5 as the average cost per each successful case: last year it was annas 2·3. At the Karmála Dispensary 261 persons were primarily vaccinated and 5 were re-vaccinated. There were 343 deaths from small-pox: last year there were 135.

Sátára Collectorate.

65. In the Sátára Collectorate there are 15 vaccinators, but 2 additional ones are required for the towns of Karád and Wái. Each vaccinator had, on an average, a population of 70,823 persons and an area of 332·5 square miles. There were 38,337 persons primarily vaccinated and 948 revaccinated. The successful cases in each were 36,166 or 94·34 and 753 or 79·43 per cent. The rate of protection per mille of population was 34·75 against 33·50 in 1883-84. Each vaccinator vaccinated 2,619 persons. The total cost was Rs. 4,954-7-10, or annas 2-2 per each successful case, or 1 pie more than last year. In 7 dispensaries 1,399 persons were primarily vaccinated and 17 were re-vaccinated. There were 823 deaths from small-pox against 759 last year.

Ratnágiri Collectorate.

66. In the Ratnágiri Collectorate there are 13 vaccinators, but 2 more are required for the towns of Ratnágiri and Vengurla. Each vaccinator had, on an average, a population of 76,699 persons and an area of 301·7 square miles. The number of primary vaccinations was 25,396 and of re-vaccinations 479. The successful cases were respectively 25,183 and 387, or 99·16 and 80·79 per cent. The rate of protection per mille of population was 25·64, and last year it was 26·24. The average number of vaccinations for each vaccinator was 1,990. The total cost was Rs. 4,038-2-9, or annas 2-6 per each successful case against annas 2-5 last year. At the Dápoli and Vengurla dispensaries 134 persons were primarily vaccinated and none were re-vaccinated. There were 678 deaths from small-pox against 1,432 in 1883-84.

Native States in the Central Registration District.

67. The Native States are Akalkot Modnimb, which belongs to the Miraj State, Sátára Jághirs and Sávantvádi. They have a collective population of 564,933 persons and an area of 4,807 square miles. In Modnimb vaccination is carried on by the Mádha Táluka vaccinator of the Sholápur Zilla, as it is close to that táluka. He is paid Rs. 5 per month by the Miraj State. The Sávantvádi State has two vaccinators. The Akalkot State has 1 vaccinator, and the Medical Officers of the Akalkot and Sávantvádi Dispensaries attend to the

vaccination work of those towns. The Sátára Jághirs have five vaccinators. The total number operated on excluding the dispensaries was 14,505, of which 2,452 were re-vaccinations. The successful cases were 11,417, or 94·72 per cent., and 1,515, or 61·79 per cent., under each kind of operation. The rate of protection per 1,000 was 22·89 against 28·57 last year. The total cost was Rs. 2,072-10-5, or annas 2-7 per each successful case, against annas 2-1 last year. In the Akalkot and Sávantvádi Dispensaries 490 persons were primarily vaccinated and only 14 were re-vaccinated.

Progress in the Southern Registration District.

68. The Southern Registration District comprises the collectorates of Belgaum, Dhárwár, Kaládgi and Kánara, the Kolhápur States, the Southern Marátha Jághirs and the Sávanúr State under the Dhárwár Agency. It has a population of 41,32,186 and an area of 24,390·4 square miles. It was administered by a Deputy Sanitary Commissioner, who had under his orders 5 Inspectors of Sanitation and Vaccination, 1 Assistant Superintendent of Vaccination, 2 clerks, 7 municipal, 47 local fund, 4 candidate and 28 Native State vaccinators and 91 peons. Vaccination was carried on by the Medical Officers of 35 dispensaries. Seven additional vaccinators for 2 towns, 3 rural circles and 2 Native States are required to strengthen the establishment. Each vaccinator had an area of 297·44 square miles, with an average population of 50,393 persons. They primarily vaccinated 127,770 and re-vaccinated 4,474 persons, and last year the respective numbers were 1,33,017 and 4,939. There were 121,182, or 94·84 per cent., successful primary vaccinations, and 3,061, or 68·42 per cent., re-vaccinations, the rate of protection per mille of population being 30·07 against 31·53 last year. The total cost was Rs. 46,740-15-4, and the average cost per each successful case was annas 6 against annas 5-2 last year. Each vaccinator vaccinated 1,613 persons. In the dispensaries 6,083 persons were primarily vaccinated and 560 were re-vaccinated. There were 4,544 deaths from small-pox against 5,661 last year.

Belgaum Collectorate.

69. In the Belgaum Collectorate there are 13 vaccinators. Each vaccinator had, on an average, a population of 66,463 persons and an area of 358·2 square miles. The number of persons under each operation was 23,149 and 1,150. The successful cases were 22,024 and 778, the percentages of success being 95·14 and 67·65 or 26·39 per mille of population against 82·57 for last year. Each vaccinator vaccinated 1,869 persons. The total cost was Rs. 4,543-9-2 or annas 3-2 per each successful case: last year it amounted to annas 2-2. In 5 dispensaries 1,298 persons were primarily vaccinated and 63 re-vaccinated. There were 1,530 deaths from small pox against 1,440 last year.

Dhárwár Collectorate.

70. In the Dhárwár Collectorate there are, in all, 18 vaccinators, each of whom had, on an average, a population of 49,050 persons and an area of 251·9 square miles. There were 30,924 persons primarily vaccinated and 854 re-vaccinated. The successful cases in each were 29,426 and 551, or 95·16 and 64·52 per cent. Out of every 1,000 persons 33·95 were successfully vaccinated against 31·56 in 1883-84. The average number of vaccinations performed by each vaccinator was 1,765. The total cost was Rs. 6,051-15-4 or annas 3-3 per each successful case, or 1 pie more than last year. In Háveri Dispensary 104 persons were primarily vaccinated and 4 persons were re-vaccinated. There were 1,465 deaths from small-pox: last year there were 1,728.

Kaládgi Collectorate.

71. In the Kaládgi Collectorate there are 9 vaccinators. The Bágalkot town vaccinator attends to the vaccination work in the surrounding villages of the táluka besides the town, and, consequently, a moiety of his pay is defrayed by the municipality as well as by the local fund committee. At least 3 additional vaccinators are required for the tálukas of Hungund, Bádámi and Indi. Each vaccinator had, on an average, a population of 70,944 persons and an area of 639·7 square miles. The number of persons primarily vaccinated was 23,101 and those re-vaccinated were 253. The successful cases in each were 22,166 or 95·95, and 201 or 79·45 per cent. The rate of protection per mille of population was 35·03 against 31·39 in the preceding year. The average number of vaccinations performed by each

vaccinator was 2,595 persons. The total cost was Rs. 3,558-9-9, or annas 2-7 per each successful case against annas 2-3 in 1883-84. Vaccination was carried on in 7 dispensaries—at Bágevádi, Ilkal, Bijápur, Muddebihál, Indi and Sindgi and in the Káladgi Jail, and the number of persons primarily vaccinated was 1,109 and those re-vaccinated were only 38. There were 500 deaths from small-pox against 1,971 last year.

Kánara Collectorate.

72. In the Kánara Collectorate there are 14 vaccinators. Each had, on an average, a population of 30,131 persons and an area of 279·3 square miles. Those primarily vaccinated were 11,021 and those re-vaccinated were 1,092. The numbers of successful cases were respectively 10,065 and 734, the percentages being 91·33 and 67·22. The rate of protection per mille of population was 25·60: last year it was 27·64. Each vaccinator vaccinated 865 persons. The total cost was Rs. 3,833-13-7, or annas 5-8 per each successful case against annas 5-1 in the previous year. In 7 dispensaries 756 persons were primarily vaccinated and 56 were re-vaccinated. There were 1,049 deaths from small pox, whilst last year there were 522.

Native States in the Southern Deccan Registratian District.

73. The States of Kolhápur, the Southern Marátha Jághírs and the Savnúr State, under the Dhárwár Agency, have a collective area of 5,531 square miles and a population of 1,324,932 persons. There were 28 vaccinators, but 2 more are required for Gad Hinglaj and Panhála in the Kolhápur States. The Kolhápur States have 1 Assistant Superintendent of Vaccination, and the Jamkhandi State has an Inspector of Sanitation and Vaccination. There were 39,575 persons primarily vaccinated and 1,125 re-vaccinated. The successful cases of each kind were 37,501 and 797. The percentages of success were respectively 94·76 and 70·84. The rate per mille of population protected was 28·91 against 32·13 for last year. Each vaccinator, on an average, vaccinated 1,454 persons. The total cost was Rs. 8,211-3-2, or annas 3-5 per each successful case against annas 2-11 last year. In 15 dispensaries—5 in the Kolhápur States, 6 in the Sángli States and 4 at Rámdurg, Mudhol, Miraj and Budgaon—2,816 persons were primarily vaccinated and 399 were re-vaccinated.

Progress in the Eastern Gujarát Registration District.

74. The Eastern Gujarát Registration District comprises the Collectorates of Surat, Broach, Kaira, Panch Maháls and Ahmedabad and the Native States of Mahi Kántha, Rewa Kántha, Cambay, the Surat Agency and Jámbughoda. It has a population of 4,162,314 persons and an area of 27,712·075 square miles. It was administered by a Deputy Sanitary Commissioner, who had under his orders 5 Inspectors of Sanitation and Vaccination, 2 clerks, 7 municipal, 39 local fund, 4 candidate and 21 Native State vaccinators, and 74 peons. The area for each vaccinator was 413·613 square miles, with a population of 62,124. Eight more vaccinators are required—4 for town circles, 1 for a rural circle and three for the Native States of Lúnáváda, Sunth and Kadána. Out of 120,954 primary vaccinations and 2,223 re-vaccinations there were 117,173 or 96·87, and 1,323 or 59·51 per cent., successful. Last year the numbers primarily vaccinated and re-vaccinated were respectively 127,047 and 7,317. The protected were 28·47 per mille of population: last year they were 30·56. Each vaccinator vaccinated 1,838 persons. The total expenditure was Rs. 38,033-10-7 and the average cost per each successful case was annas 5-2, whilst last year it was annas 4-10. In 12 dispensaries 2,841 persons were primarily vaccinated and 87 were re-vaccinated. The deaths from small-pox were 426 against 798 last year.

Surat Collectorate.

75. In the Collectorate of Surat there are 11 vaccinators, but 1 more is required for Bulsár town. Each vaccinator had, on an average, a population of 55,836 persons and an area of 151·1 square miles. The number of persons primarily vaccinated was 17,068, and the successful cases were 16,374 or 95·93 per cent. The number of persons re-vaccinated was 207, and the successful cases were 88, or 42·51 per cent. Protection was afforded to 26·80 out of every 1,000 of population: last year the rate was 26·62. Each vaccinator, on an average, operated on 1,570 persons. The total cost was Rs. 3,349-5-8, and the average cost per each successful case was

annas 3-3, whilst in the preceding year it was annas 3-0. In 4 dispensaries 799 persons were primarily vaccinated and 10 were re-vaccinated. There were 49 deaths, from small-pox and last year there were 498.

Broach Collectorate.

76. In the Collectorate of Broach there are 6 vaccinators. Two additional vaccinators are wanted for the town of Jambusar and for the Hánsot Petha. Each vaccinator had, on an average, a population of 54,488 persons and an area of 242·2 square miles. The primarily vaccinated were 10,758 and the re-vaccinated were 717. Of these the successful cases were 10,249 and 396 respectively, or 95·27 and 55·23 per cent. The rate of protection per 1,000 was 32·56 against 40·59 last year. Each vaccinator vaccinated 1,912 persons, and the average cost per each successful case was annas 2-10 calculated on the total cost of Rs. 1,877-13-0 : last year each successful case cost annas 2-3. In the dispensary at Elao 78 persons were primarily vaccinated but there were no re-vaccinations. There were 8 deaths from small-pox, whilst last year there were 68.

Kaira Collectorate.

77. In the Kaira Collectorate there are 9 vaccinators. Each vaccinator had, on an average, a population of 89,422 persons and an area of 178·7 square miles. Out of 23,184 persons primarily vaccinated and 137 re-vaccinated, 22,607 or 97·51, and 78 or 56·93 per cent., were successfully operated on. The protected were 28·19, and in 1883-84 they were 30·67 per 1,000 of population. Each vaccinator, on an average, vaccinated 2,591 persons. The total cost amounted to Rs. 3,088-2-4, or annas 2-3 per each successful case : last year it was anna 1-10. In 4 dispensaries there were 1,440 persons primarily vaccinated and 50 were re-vaccinated. There were 156 deaths from small pox : last year there were 40.

Panch Mahâls.

78. In the Panch Mahâls there are 6 vaccinators, and an additional one is required for the town of Dohad. Each vaccinator had, on an average, a population of 42,580 persons and an area of 268·9 square miles. There were 9,086 primary vaccinations and 504 re-vaccinations. Of these the successful were 8,877 and 359, or 97·70 and 71·23 per cent. The rate of protection per mille of population was 36·15, and in the preceding year it was 36·21. Each vaccinator vaccinated 1,598 persons. The total expenditure was Rs. 1,718-4-4, or annas 3-0 : last year it was annas 2-7. There were 70 deaths from small-pox last year, whilst this year there were 35 deaths.

Ahmedabad Collectorate.

79. In the Ahmedabad Collectorate there are 14 vaccinators, but another is wanted for the town of Gogha. Each vaccinator had, on an average, a population of 61,166 persons and an area of 272·9 square miles. There were 28,195 persons primarily vaccinated and 447 re-vaccinated. The successful cases were 27,374 and 247, or 97·09 and 55·26 per cent. The rate of protection per mille of population was 32·26 against 32·70 in the previous year. Each vaccinator vaccinated 2,046 persons. The total cost was Rs. 4,174-9-1. The average cost per successful case was annas 2-5, the same as in 1883-84. In 2 dispensaries 340 persons were primarily vaccinated and only one was re-vaccinated. There were 178 deaths, from small-pox, whilst last year there were 122.

Native States in the Eastern Gujarát Registration District.

80. The States of Mahi Kántha, Rewa Kántha, Cambay, the Surat Agency and Jámbughoda have a collective area of 17,368 square miles and a population of 1,282,422 persons. In Sachín and Jámbughoda States vaccination is performed by the vaccinator of the Chorási Táluka of the Surat Zilla, and in the latter by the vaccinator of Hálol, Panch Mahâls. There were 21 vaccinators employed in all these States, Dharampor having now 2 instead of one vaccinator, and 3 more are required, 1 in each of the States of Lúnáváda, Sunth and Kadána. The numbers of primarily vaccinated were 32,274 and those re-vaccinated were 209 ; of these 31,334 and 154 or 97·09 and 73·68 per cent., were successfully operated on. Protection was afforded to 24·55 per mille of population : last year the rate was 27·01. Each vaccinator, on an average, operated on 1,547 persons. The local fund vaccinators in Sachín and Jámbughoda vaccinated 389 and 2 persons under each kind of operation ; of these 358 or 92·03 and 1 or 50·00 per cent. were successfully operated on. Protection was afforded to 16·20 persons per 1,000 of population against

44·76 in the preceding year. The total cost in all the States was Rs. 5,382-13-3, or annas 2-8 against annas 2-5 last year, per each successful case. The Medical Officer of the Sádra Dispensary in Mahi Kántha States primarily vaccinated 184 persons and re-vaccinated 26.

Progress in the Western Gujarát Circle.

81. The Western Gujarát Circle comprises the Native States of Káthiawár and Pálanpur. It has an area of 27,256·48 square miles and a population of 2,920,377 persons. It was administered by a Superintendent of Vaccination, who had under his orders 2 Assistant Superintendents 2 clerks, 2 Government and 42 Native State vaccinators and 50 peons. The average number of square miles for each vaccinator was 619·47 and the average population of his area 66,372. Vaccination was carried on in 15 dispensaries. Two more vaccinators and 1 candidate are still required in the States of Pálanpur. The number of primary vaccinations and re-vaccinations were respectively 98,787 and 25,150 against 102,573 and 7,166 in the preceding year. The successful cases were 89,221 and 15,898, their percentages being 90·32 and 63·21. The rate of protection was 36·00 per 1,000 of population: last year it was 33·91. Each vaccinator vaccinated 2,817 persons. The total cost was Rs. 30,148-3-7, or annas 4-7 per each successful case. In the preceding year it was annas 4-8. In dispensaries there were primarily vaccinated 2,457 persons, and 498 were re-vaccinated.

Province of Káthiáwár.

82. The States of Káthiáwár have a collective area of 19,256·48 square miles and a population of 2,343,899 persons. There were 37 vaccinators, who primarily vaccinated 80,129 persons and re-vaccinated 23,827. The successful cases were 71,814 and 14,973, or 89·62 and 62·84 per cent. Protection was afforded to 37·03 per 1,000 of population against 34·10 last year. The average per each vaccinator was 2,810 operations, and the average cost per each successful case was like last year annas 2-10 calculated on the total cost of Rs. 15,230-3-8. In 15 dispensaries 2,457 persons were primarily vaccinated and 498 re-vaccinated.

Pálanpur States.

83. The Pálanpur States have an area of 6,041 square miles and a population of 576,478 persons. There were 7 vaccinators, and 2 more are required, as also a candidate vaccinator. The number of persons primarily vaccinated was 18,658 and that of the re-vaccinated was 1,323. The successful cases were 17,407 and 925, or 93·30 and 69·92 per cent. The rate of protection per mille of population was 31·80 against 33·13 in the preceding year. The average work per each vaccinator was 2,854 persons. The total cost was Rs. 2,046-7-0, or annas 1-9 per each successful case, the same as last year.

Progress in the Sind Registration District.

84. The Sind Registration District comprises the Collectorates of Karáchi Hyderabad and Shikárpur, the Thar and Párkar, the Upper Sind Frontier and the Khairpur State. It has an area of 54,123·01 square miles and a population of 2,542,976. It was administered by a Deputy Sanitary Commissioner, who had under his orders 1 Superintendent of Vaccination, 6 Inspectors of Sanitation and Vaccination, 2 clerks, 7 municipal, 50 local fund, 5 candidate and 3 Native State vaccinators and 68 peons. Three more are required for the rural circles in the Karáchi Collectorate and 1 in the Khairpur State. Vaccination was carried on in 20 dispensaries. Each vaccinator had an area of 902·05 square miles, with a population of 42,383 persons. Those primarily vaccinated numbered 82,159, and the re-vaccinated were 18,751, against 84,120 and 21,467 in the preceding year. The successful cases were respectively 77,763 and 12,053. The rates of success were 94·65 and 64·28 per cent., and that of protection was 35·32 per 1,000 of population. It was 37·24 last year. Each vaccinator on an average vaccinated 1,682 persons. The total cost was Rs. 44,126-3-5, and for each successful case it was annas 7-10, or 8 pies more than last year. There were 1,577 persons primarily vaccinated and 284 re-vaccinated by Medical Officers of 20 dispensaries. There were 869 deaths from small-pox against 905 in the previous year.

Karáchi Collectorate.

85. In the Karáchi Collectorate there are 12 vaccinators, but 3 more are required, so as to have 1 for each rural circle. Each vaccinator had, on an average, a population of 39,891

persons and an area of 1,176·28 square miles. The number primarily vaccinated was 15,819 and the re-vaccinated were 2,931. The successful cases were respectively 15,359 and 2,028 or 97·09 and 69·19 per cent., whilst 36·32 per 1,000 of population were protected: last year the rate was 38·78. Each vaccinator vaccinated 1,562 persons. The total cost was Rs. 4,146-3-11, or annas 3-10 per each successful case: in the preceding year it was annas 3-4. In 6 dispensaries 466 persons were primarily vaccinated and 20 were re-vaccinated. The deaths from small-pox were 297 against 215 in the previous year.

Hyderabad Collectorate.

86. In the Hyderabad Collectorate there are 14 vaccinators, each of whom had, on an average, a population of 53,902 persons and an area of 644·97 square miles. There were 20,494 persons primarily vaccinated and 2174 re-vaccinated; of these 19,076 or 93·08 and 1,308 or 60·17 per cent. were successfully operated on. The rate of protection per mille of population was 27·01: last year it was 31·57. Each vaccinator, on an average, vaccinated 1,619 persons. The total cost amounted to Rs. 4931-15-0 which gives annas 3-10 as the cost per each successful case, or 6 pies more than last year. In 7 dispensaries 549 persons were primarily vaccinated and 23 were re-vaccinated. There were 477 deaths from small-pox against 659 in the preceding year.

Thar and Párkar.

87. In the Thar and Párkar there are 7 vaccinators, each of whom had, on an average, a population of 29,049 persons and an area of 1,818 square miles. They primarily vaccinated 8,567 and re-vaccinated 4,331 persons. The successful cases were 8,086 or 94·39 and 2,836 or 65·48 per cent. The protected were 53·71 per 1,000 against 61·66 in the preceding year. Each vaccinator, on an average, vaccinated 1,843 persons. The total cost was Rs. 2,356-9-3, or annas 3-5 per successful case: last year it was annas 3-4. In 4 dispensaries 207 persons were primarily vaccinated and 5 were re-vaccinated. There were 30 deaths from small-pox and last year there were 28.

Shikárpur Collectorate.

88. In the Shikárpur Collectorate there are 20 vaccinators, each of whom has, on an average, a population of 41,731 persons and an area of 490·46 square miles. They primarily vaccinated 28,078 and re-vaccinated 7,177 persons. The successful cases were 26,464 or 94·25, and 4,485 or 62·49 per cent. The protected were 37·08 per mille of population against 36·56 in the preceding year. Each vaccinator vaccinated 1,763 persons. The total cost was Rs. 6,889-14-0 or annas 3-7 per each successful case; last year it was annas 3-8. In 3 dispensaries there were 355 persons primarily vaccinated and 236 re-vaccinated. There were 5 deaths from small-pox against 2 last year.

Upper Sind Frontier.

89. In the Upper Sind Frontier there are 4 vaccinators, each of whom has, on an average, a population of 35,636 persons and an area of 582·71 square miles. They primarily vaccinated 5,768 persons and re-vaccinated 2,054. The successful cases were 5,416 and 1,322 or 93·90 and 64·36 per cent. The rate of protection per mille of population was 47·26, and last year it was 44·59. The average number of operations for each vaccinator was 1,955, and the cost of each successful case was like the preceding year annas 3-8, calculated on the total cost of Rs. 1,556-10-1. There were 14 deaths from small-pox this year: last year there was one.

Khairpur State.

90. The Khairpur State has an area of 6,109 square miles and a population of 129,153 persons. It has 3 vaccinators but one more is required. They primarily vaccinated 3,433 and re-vaccinated 84 persons; of these 3,362 or 97·93 and 74 or 88·10 per cent. were successfully operated on. The protected were 26·60 per mille of pupulation: last year they were 23·61. Each vaccinator, on an average, vaccinated 1,172 persons. The total cost was Rs. 1,317, or annas 6-2 per each successful case against annas 6-11 in 1883-84.

Progress in the Baroda Circle.

91. The States of Baroda have a population of 2,185,005 persons and an area of 8,570 square miles. It was administered by the Chief Medical Officer employed by the Darbár, who had under his orders 3 Inspectors, 31 vaccinators and 34 peons. Each vaccinator has, on an average, 276 square miles and a

population of 70,484. There were 64,547 persons primarily vaccinated and 283 re-vaccinated against 66,992 and 460 in 1883-84. The successful cases were 61,620 and 210, or 95·46 and 74·20 per cent. The rate of protection per mille of population was 28·30; last year it was 29·69. Each vaccinator vaccinated 2,091 persons. The total cost was Rs. 12,055-7-5, or annas 3-1 per each successful case against annas 2-11 in 1883-84. Vaccinations were performed in 22 dispensaries, whilst last year it was carried on in 16. In these dispensaries 2,264 persons were primarily vaccinated. There were no re-vaccinations.

Progress in the Cutch Circle.

92. The State of Cutch has a population of 512,084 persons in an area of 6,500 square miles. It was administered by the Medical Officer to H. H. the Ráo of Cutch, who had under his orders an Assistant Superintendent of Vaccination, 17 vaccinators and 19 peons. Each vaccinator has an average population of 30,123 and an area of 382 square miles. The number of persons primarily vaccinated was 20,486 and that of the re-vaccinated was 188 against 18,803 and 264 last year. The successful cases were 20,315 and 170, or 99·17 and 90·43 per cent. The rate of protection per mille of population was 40·00: last year it was 36·85. Each vaccinator operated, on an average, on 1,216 persons. The total expenditure was Rs. 7,728-12-10, and the average cost per each successful case was annas 6: in the preceding year it was annas 6-3.

Progress in Aden.

93. Aden has an area of 11·6 square miles and a population of 34,860 persons. The municipality defrays the cost of 1 vaccinator and 1 peon. This vaccinator works under the supervision of the Civil Surgeon. There were 411 persons primarily vaccinated and only 1 person was re-vaccinated against 581 and 4 in the preceding year. Of the primary vaccinations 327, or 79·56 per cent., were successful. The re-vaccination case was also successful. The rate of protection afforded was 9·41 per 1,000 of population: last year it was 12·25. The total cost was Rs. 414-1-9 and the average cost per each successful case was Rs. 1-4-2: in the preceding year it was annas 15-11. In the dispensary of Shaik Othman 221 persons were primarily vaccinated and only one was re-vaccinated.

Progress in Muskat and Bushire.

94. There were only 63 primary vaccinations in Muskat against 117 in the preceding year. The successful cases were 47 or 74·60 per cent. There were 3 cases of re-vaccinations and they were all unsuccessful. In the Residency Dispensary, Bushire, there were only 6 persons primarily vaccinated against 341 in 1883-84. Of these 6 cases only 2 were successful, or 33·33 per cent.

Tour of Deputy Sanitary Commissioners and Superintendent of Vaccination.

95. (*a*). In the Western Registration District the Deputy Sanitary Commissioner went through the tálukas of Chálisgaon, Dhulia, Nandurbár and Pimpálner in Khándesh; the tálukas of Násik, Niphád, Nándgaon Chándvad and Yeola in Násik; the tálukas of Sálsette, Bassein, Kalyán, Karjat, Bhiwandi and Sáhápur in Thána, and the táluka of Panvel in the Collectorate of Kolába. None of the Native States were visited this year. He travelled over 4,233 miles in 150 days, visited 167 villages, and inspected 6,412 children.

(*b*). In the Central Registration District the Deputy Sanitary Commissioner went through the Párner Táluka of the Ahmednagar Zilla; all the tálukas of Poona except Junnar, Khed and Sirúr; all the tálukas of Sholápur except Bársi and Sángola; the tálukas of Sátára, Mán, Koregaon, Karád and Pátan of Sátára and all the tálukas of the Ratnágiri Zilla. The only Native State that he passed through was Bhor. The total number of children inspected was 8,699 in 247 villages. The number of miles travelled was 1,955 in 127 days.

(*c*). The Deputy Sanitary Commissioner of the Southern Registration District passed through the tálukas of Belgaum, Sampgaon, Parasgad and Khánápur in Belgaum; all the tálukas of Dhárwár; all the tálukas of Kaládgi except Indi; and the tálukas of Kárwár, Sirsi, Yellápur and Haliyál in Kánara Zilla. He passed through the Native States of Lakshmeshvar, Shirhatti and Rámdurg. He inspected 5,887 children in 167 villages. The number of miles travelled was 2,633½ in 154 days.

(*d*). The Deputy Sanitary Commissioner in the Eastern Gujarát Registration District went through the tálukas of Chorási and Olpád in Surat; the tálukas

of Broach, Ankleshwár and Hansot in Broach; the tálukas of Nadiád, Borsad, Anand and Thásra in Kaira; the tálukas of Kálol and Hálol in Panch Maháls; and all the tálukas of Ahmedabad Zilla except Parántij. He also went through the Native States of Pandu Mewas in Rewa Kántha and Watrak Kántha in Mahi Kántha. He travelled over 2,505 miles in 157 days, and saw 9,736 children in 331 villages.

(*e*). In the Western Gujarát Circle the Superintendent of Vaccination went through the States of Limbdi, Jhinjhúváda, Wadhwán and Vánkáner in the Jhálávád Pránt; and the States of Sultánpur, Rájkot, Navánagar and Dhrol in the Hálár Pránt; the States of Verával, Mángrol, Bilka and Jetpur in Sorath Pránt; and the States of Bhávanagar, Botád, Sihor and Vála in Gohelvád Pránt; the States of Pálanpur and Deesa in Pálanpur State. He travelled over 1,627 miles in 97 days and inspected 23,841 children in 170 villages.

(*f*). In Sind the Deputy Sanitary Commissioner went through the tálukas of Ghorábári, Jati, Tatta, Sujával, Mirpur Sákro, Sháhábandar, Mirpur Batoro, Kotri and Karáchi town of the Karáchi Collectorate; all the tálukas of Hyderabad except Badin, Moro, Naushahro and Kandiáro; the tálukas of Sanghar, Khipra and Umarkot in Thar and Párkar; and the towns of Shikárpur and Sukkur in the Shikárpur Collectorate. The Upper Sind Frontier and the Khairpur State were not visited this year. He inspected 7,683 children in 295 villages, and travelled over 2,684 miles in 132 days. The 5 Deputy Sanitary Commissioners and the Superintendent of Vaccination have visited all the districts, except Upper Sind Frontier. The Native States that were not visited this year are Khándesh Agency, Jawhár, Janjira, Akálkot, Modnimb, Sátára Jághirs except Bhor, Sávantvádi, Southern Marátha Jághirs except Lakshmeshvar, Shirhatti and Rámdurg, Rewa Kántha except Pandu Mewas, Mahi Kántha except Watrak Kántha, Bánsda, Dharampor, Cambay, Sachín, Jámbughoda and Khairpur. There were collectively 306 encampments, 817 travelling days, 15,637½ miles travelled, 1,377 villages visited, and 62,258 children inspected.

The Bombay Vaccination Act No. I. of 1877.

96. The compulsory Vaccination Act (I. of 1877) has been in force for 7 years, and it is worked fairly well. The following table shows the progress in the infants protected during the last 9 years, the first 2 being before, and the last 7 after, the introduction of the Act:—

Years.		Births returned as having been registered.	Deaths registered among Children under 1 year old.	Children available for Vaccination.		Children under 1 year successfully vaccinated.		
				Births *minus* Deaths.	At the Rate of 31 per 1,000 of Population.	Number.	Ratio per 100 on those in Column 4.	Ratio per 100 on those in Column 5.
Before the introduction of the Act.	1876-77	13,466	6,179	7,287	19,977	9,840	135·03	49·26
	1877-78	13,720	7,781	5,939	19,977	7,212	121·43	36·10
After the introduction of the Act.	1878-79	13,896	6,417	7,479	19,977	6,558	87·69	32·83
	1879-80	14,341	5,274	9,067	19,977	7,825	86·30	39·17
	1880-81	16,997	6,104	10,893	19,977	10,416	95·62	52·14
	1881-82	16,381	6,279	10,102	23,969	12,017	118·96	50·14
	1882-83	15,094	5,720	9,374	23,969	14,940	159·38	62·33
	1883-84	14,932	6,514	8,418	23,969	12,331	146·48	51·45
	1884-85	14,377	6,340	8,037	23,969	13,449	167·34	56·11

Karáchi Vaccination Act.

97. This is the fifth complete year in which the Karáchi Vaccination Act (No. IV. of 1879) has been worked in that city, and it will be seen from the following table that great improvement has been effected in the number of infants protected :—

Years.	Births returned as having been registered.	Deaths registered among Children under 1 year old.	Children available for Vaccination.		Children under 1 year successfully vaccinated.		
			Births *Minus.* Deaths.	At the Rate of 31 per 1,000 of Population.	Number.	Ratio per 100 on those in Column 4.	Ratio per 100 on those in Column 5.
1880-81...	1,878	309	1,569	2,118	1,917	122·18	90·51
1881-82...	2,405	489	1,916	2,118	2,516	131·32	118·79
1882-83...	2,985	514	2,471	2,118	2,827	114·41	133·47
1883-84...	3,273	728	2,545	2,118	2,683	105·42	126·68
1884-85...	3,189	706	2,483	2,118	3,003	120·94	141·78

Suggestion for the more effectual spread of vaccination.

98. The Deputy Sanitary Commissioner, Southern Registration District, says that "great difficulty has been found in supplying the places of sick vaccinators by competent men. There are only four candidate vaccinators for the District on the wretched pay of Rs. 5 per mensem. This stipend is insufficient to attract good men to the Department.

"There is no other reserve beyond these candidates excepting a needy class of Umedwárs who attach themselves to vaccinators on no pay whatever and they are generally very ignorant.

"The vaccinators' pay should be increased, and if this were done I think we should get much better work performed. It is barely possible for 3rd grade vaccinators to do their arduous work on Rs. 14 per mensem."

APPENDICES.

GENERAL POPULATION AND VITAL STATISTICS.

ANNUAL FORM NO. I.—BIRTHS *registered in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1884.*

1	2	3	4			5			6	7	8
No.	DISTRICTS.	Population according to Census of 1881.	NUMBER OF BIRTHS REGISTERED.			RATIO OF BIRTHS PER 1,000 OF POPULATION.			Number of Males born to every 100 Females born.	Excess of Births over Deaths per 1,000 of Population.	Excess of Deaths over Births per 1,000 of Population.
			Male.	Female.	Total.	Male.	Female.	Total.			
	Western Registration District.										
1	Khándesh	1,237,231	23,551	21,619	45,170	19·04	17·47	36·51	108·94	14·78	...
2	Násik	781,206	13,543	12,720	26,263	17·34	16·28	33·62	106·47	9·05	...
3	Thána	807,367	12,530	12,114	24,644	15·52	15·00	30·52	103·43	6·19	...
4	City of Bombay	773,196	7,494	6,883	14,377	9·69	8·90	18·59	108·87	...	10·28
5	Kolába	482,830	6,974	6,352	13,326	14·44	13·16	27·60	109·79	5·11	...
	Central Registration District.										
6	Ahmednagar	751,228	15,870	14,666	30,536	21·13	19·52	40·65	108·21	15·16	...
7	Poona	900,621	16,127	14,614	30,741	17·91	16·22	34·13	110·35	10·45	...
8	Sholápur	582,487	11,846	11,377	23,223	20·34	19·53	39·87	104·12	14·82	...
9	Sátára	1,062,350	23,376	22,108	45,484	22·00	20·81	42·81	105·74	16·20	...
10	Ratnágiri	997,090	10,815	9,784	20,599	10·84	9·82	20·66	110·54	4·82	...
	Southern Registration District.										
11	Belgaum	864,014	17,908	17,231	35,139	20·73	19·94	40·67	103·93	8·27	...
12	Dhárwár	882,907	19,531	18,811	38,342	22·12	21·31	43·43	103·83	9·26	...
13	Kaládgi	638,493	12,711	12,136	24,847	19·91	19·00	38·91	104·74	13·34	...
14	Kánara	421,840	6,192	6,135	12,327	14·68	14·54	29·22	100·92	...	0·79
	Eastern Gujarát Registration District.										
15	Surat	614,198	10,916	10,539	21,455	17·77	17·15	34·93	103·58	7·19	...
16	Broach	328,920	5,883	5,571	11,454	17·99	17·04	35·03	105·60	...	0·12
17	Kaira	804,800	15,967	14,258	30,225	19·84	17·72	37·56	111·99	8·96	...
18	Panch Mahále	255,479	4,639	4,287	8,926	18·16	16·78	34·94	108·21	15·44	...
19	Ahmedabad	856,324	15,200	13,644	28,844	17·75	15·93	33·68	111·40	4·08	...
	Sind Registration District.										
20	Karáchi	478,688	5,905	4,732	10,637	12·34	9·88	22·22	124·79	4·63	...
21	Hyderabad	754,624	7,623	5,134	12,757	10·11	6·80	16·91	148·48	1·14	...
22	Thar and Párkar	253,344	2,773	2,241	5,014	13·64	11·02	24·66	123·74	9·11	...
23	Shikárpur	852,986	10,147	7,758	17,905	11·89	9·10	20·99	130·79	1·98	...
24	Upper Sind Frontier	124,181	1,465	1,023	2,488	11·79	8·24	20·03	143·21	3·99	...
	Total for the Presidency	16,454,414	278,986	255,737	534,723	16·96	15·54	32·50	109·09	7·08	...

ANNUAL FORM NO. II.—DEATHS *registered in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1884.*

1	2	3	4	5			6	7			8		
No.	DISTRICTS.	Area in Square Miles.	Average Population per Square Mile.	NUMBER OF DEATHS REGISTERED.			Number of Males died to every 100 Deaths of Females.	RATIO OF DEATHS PER 1,000 OF POPULATION.			MEAN RATIO OF DEATHS PER 1,000 DURING PREVIOUS FIVE YEARS.		
				Male.	Female.	Total.		Male.	Female.	Total.	Male.	Female.	Total.
	Western Registration District.												
1	Khándesh	9,944	124·42	14,177	12,702	26,879	111·61	22·42	21·00	21·73	26·54	24·28	23·44
2	Násik	5,940	131·51	10,105	9,089	19,194	111·18	25·43	23·68	24·57	26·04	24·28	25·18
3	Thána	2,956	268·12	10,180	9,512	19,642	106·51	24·35	24·31	24·33	22·65	22·12	24·38
4	City of Bombay	22	35,145·27	11,692	10,695	22,287	108·39	24·94	34·68	28·82	29·16	36·58	30·22
5	Kolába	1,803	267·79	5,560	4,980	10,540	111·65	27·78	20·86	21·35	20·77	18·29	19·54
	Central Registration District.												
6	Ahmednagar	6,666	112·69	10,072	9,077	19,149	111·02	26·39	24·54	25·49	26·05	24·32	25·29
7	Poona	5,348	168·40	11,173	10,159	21,332	109·98	22·32	22·80	22·48	20·43	18·74	19·65
8	Sholápur	4,521	128·84	7,700	6,889	14,589	111·77	26·46	23·95	25·24	24·23	22·63	23·48
9	Sátára	4,893	212·93	14,249	14,022	28,271	101·61	29·76	29·46	29·61	22·02	20·68	21·36
10	Ratnágiri	3,922	254·22	8,392	7,406	15,798	113·31	17·74	14·13	15·94	19·95	16·70	18·23
	Southern Registration District.												
11	Belgaum	4,657	185·53	14,360	13,633	27,993	105·33	34·20	31·73	32·40	25·45	21·25	24·43
12	Dhárwár	4,585	194·68	15,411	14,759	30,170	104·41	34·86	33·47	34·17	22·22	22·22	22·28
13	Kaládgi	5,757	110·90	8,310	8,017	16,327	103·65	26·16	24·98	25·57	21·35	19·80	20·53
14	Kánara	3,911	107·85	6,072	5,988	12,060	111·42	29·91	30·11	30·01	29·29	28·40	28·58
	Eastern Gujarát Registration District.												
15	Surat	1,662	369·55	8,795	8,244	17,039	106·68	28·74	26·75	27·74	29·50	27·78	28·64
16	Broach	1,453	225·60	6,154	5,339	11,493	115·26	30·52	33·69	32·15	31·75	29·92	30·87
17	Kaira	1,609	500·18	12,309	10,714	23,023	114·88	28·84	26·34	28·60	31·03	24·73	29·43
18	Panch Mahále	1,613	158·33	2,717	2,266	4,983	119·90	20·71	18·22	19·50	16·60	12·55	16·10
19	Ahmedabad	3,821	224·10	13,471	11,881	25,352	113·33	30·65	28·49	29·60	30·09	27·97	28·98
	Sind Registration District.												
20	Karáchi	14,115	33·91	4,636	3,783	8,419	122·55	17·43	17·79	17·59	17·56	16·01	16·88
21	Hyderabad	9,030	83·57	6,524	5,373	11,897	121·42	16·02	16·47	16·77	14·02	12·27	13·22
22	Thar and Párkar	12,729	19·98	1,785	1,378	3,163	129·54	15·88	15·15	15·55	15·34	16·48	15·39
23	Shikárpur	10,001	85·29	8,981	7,336	16,317	124·12	19·48	18·46	19·01	13·41	12·68	13·05
24	Upper Sind Frontier	2,139	58·05	1,101	891	1,992	121·57	15·69	16·40	16·04	9·04	7·63	8·44
	Total for the Presidency	124,122	132·56	214,376	194,033	408,409	110·48	25·23	24·39	24·82	23·29	22·15	22·74

N.B.—Those born dead are not included in this or any of the other statements.

ANNUAL FORM No III.—DEATHS *registered in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the month of the year 1884.*

1	2	3												4	
No.	DISTRICTS.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total Deaths registered during the year.	No.
	Western Registration District.														
1	Khándesh	2,269	1,843	2,065	1,983	2,007	1,506	1,414	2,291	2,541	2,732	3,160	3,068	26,879	1
2	Násik	1,487	1,250	1,417	1,354	1,516	1,321	1,317	1,682	1,864	2,111	2,056	1,819	19,194	2
3	Thána	1,883	1,713	1,800	1,527	1,488	1,327	1,965	1,469	1,624	1,333	1,787	2,441	19,642	3
4	City of Bombay..	2,013	1,687	1,814	1,925	1,950	1,631	1,693	1,985	1,973	1,971	1,774	1,891	22,287	4
5	Kolába	1,104	886	1,007	865	676	730	819	944	1,016	737	793	965	10,540	5
	Central Registration District.														
6	Ahmednagar	1,336	1,099	1,119	1,203	1,276	1,288	1,469	1,973	2,221	2,385	2,041	1,739	19,149	6
7	Poona	1,467	1,194	1,288	1,403	1,499	1,469	1,563	2,119	2,252	2,424	2,438	2,316	21,332	7
8	Sholápur	1,333	961	982	1,016	1,062	959	1,156	1,487	1,562	1,525	1,470	1,246	14,589	8
9	Sátára	1,868	1,702	1,972	2,181	2,431	2,311	2,414	2,795	3,019	2,720	2,602	2,836	28,271	9
10	Ratnágiri	1,696	1,547	1,451	1,358	1,151	1,286	1,415	1,272	1,109	1,130	1,177	1,206	15,798	10
	Southern Registration District.														
11	Belgaum	1,920	1,842	2,235	2,260	2,359	2,276	2,621	3,685	2,731	2,252	1,992	1,920	27,093	11
12	Dhárwár	2,100	1,982	2,222	1,982	2,011	3,120	4,003	3,323	2,584	2,217	2,360	2,266	30,170	12
13	Kaládgi	1,373	1,238	1,242	1,055	1,009	1,140	1,454	2,104	1,730	1,521	1,384	1,077	16,327	13
14	Kánara	1,201	1,063	1,170	993	994	1,006	1,079	1,008	955	937	985	1,109	12,660	14
	Eastern Gujarát Registration District.														
15	Surat	1,654	1,382	1,503	1,520	1,411	1,100	1,064	1,273	1,147	1,247	1,882	1,851	17,039	15
16	Broach	934	832	1,244	944	1,042	797	653	682	712	996	1,329	1,261	11,493	16
17	Kaira	1,366	1,422	1,812	1,965	2,104	1,868	2,191	1,870	1,856	1,906	2,426	2,088	23,023	17
18	Panch Mahále	370	342	604	451	407	392	413	362	326	347	506	463	4,983	18
19	Ahmedabad	1,781	2,073	2,398	2,166	1,860	1,473	1,486	1,997	2,035	2,324	2,964	2,746	25,352	19
	Sind Registration District.														
20	Karáchi	756	822	668	609	600	583	465	446	484	821	1,133	1,032	8,419	20
21	Hyderabad	1,124	1,171	1,068	968	785	624	494	500	598	1,266	1,779	1,552	11,897	21
22	Thar and Párkar	289	348	391	375	229	201	160	196	187	219	297	280	3,163	22
23	Shikárpur	1,289	1,147	856	616	727	768	691	635	1,060	3,565	3,312	1,600	15,317	23
24	Upper Sind Frontier	98	101	100	87	86	102	92	109	131	334	461	241	1,992	24
	Total for the Presidency ..	32,796	29,626	32,431	30,785	30,820	29,228	31,291	36,907	35,567	39,330	42,175	38,433	408,409	
	Ratio of deaths per 1,000 in each month	1·99	1·80	1·97	1·87	1·87	1·78	1·90	2·19	2·16	2·39	2·56	2·33	24·82	

ANNUAL FORM No. IV.—DEATHS *registered according to Age in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1884.*

1	2	3		4		5		6		7		8		9		10		11		12		13
No.	DISTRICTS.	Under 1 year.		1 year and under 5.		5 and under 10.		10 and under 15.		15 and under 20.		20 and under 30.		30 and under 40.		40 and under 50.		50 and under 60.		60 and upwards.		No.
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
	Western Registration District.																					
1	Khándesh	3,795	3,258	3,363	3,190	558	526	331	322	269	444	807	1,079	1,111	885	1,103	719	1,246	914	1,589	1,435	1
2	Násik	2,732	2,235	2,440	2,355	581	498	299	250	227	347	646	764	795	659	717	522	713	592	955	867	2
3	Thána	1,989	1,746	1,863	2,004	567	542	305	253	291	330	977	1,148	1,193	996	1,087	726	984	808	900	999	3
4	City of Bombay..	3,348	2,992	1,930	1,699	342	360	250	365	602	727	1,559	1,411	1,311	866	931	574	883	647	866	1,054	4
5	Kolába	1,056	788	930	878	311	264	195	141	151	192	550	639	570	408	610	438	558	509	604	652	5
	Central Registration District.																					
6	Ahmednagar	3,119	2,621	2,410	2,300	379	363	235	215	223	232	539	660	620	536	720	491	706	654	1,031	936	6
7	Poona	2,978	2,333	2,786	2,473	432	421	241	300	291	387	716	861	809	799	814	613	949	895	1,157	1,217	7
8	Sholápur	2,243	1,727	2,029	1,860	202	277	194	172	176	239	478	389	525	430	553	403	547	538	693	666	8
9	Sátára	4,194	3,657	4,031	4,202	690	659	320	307	271	352	674	775	734	766	847	671	1,092	848	1,488	1,789	9
10	Ratnágiri	876	721	1,027	1,016	405	373	336	260	388	310	831	807	906	776	923	632	977	744	1,723	1,767	10
	Southern Registration District.																					
11	Belgaum	3,094	2,581	3,894	4,040	1,023	1,063	554	429	364	431	1,079	1,215	1,123	1,003	1,025	684	983	808	1,241	1,409	11
12	Dhárwár	4,004	3,368	3,295	3,240	918	873	503	428	446	560	1,345	1,620	1,340	1,339	1,222	972	1,051	1,052	1,187	1,327	12
13	Kaládgi	2,153	1,727	2,089	2,039	372	502	327	303	246	293	557	831	641	653	603	503	541	508	532	658	13
14	Kánara	1,389	1,275	761	784	255	247	179	168	240	313	976	1,040	990	658	678	405	541	423	657	668	14
	Eastern Gujarát Registration District.																					
15	Surat	1,740	1,656	1,748	1,657	418	393	264	210	228	283	668	838	760	729	841	561	923	629	1,200	1,289	15
16	Broach	1,344	1,212	1,227	1,056	291	213	172	170	162	161	513	499	718	651	677	436	598	438	552	553	16
17	Kaira	2,962	2,958	2,873	2,243	454	299	373	289	302	291	835	746	1,653	833	1,089	729	1,142	868	1,153	1,372	17
18	Panch Mahále	2,962	541	419	393	126	117	98	78	107	84	228	216	326	221	311	167	312	196	243	250	18
19	Ahmedabad	347	3,183	2,786	2,503	585	482	393	321	469	453	1,122	998	1,222	959	1,184	883	1,050	927	1,072	1,246	19
	Sind Registration District.																					
20	Karáchi		902	534	517	237	176	137	103	187	162	489	473	556	303	529	316	416	251	508	455	20
21	Hyderabad	1,033	1,244	790	805	325	281	261	165	264	261	881	762	831	615	747	415	574	365	571	460	21
22	Thar and Párkar	1,330	300	197	187	93	64	57	48	47	46	174	152	157	144	212	99	213	113	308	225	22
23	Shikárpur	227	1,321	1,005	972	444	370	313	169	358	301	959	975	1,165	819	1,028	598	862	406	881	719	23
24	Upper Sind Frontier	1,936	229	179	163	66	50	41	20	47	39	90	104	111	101	102	57	86	47	138	89	24
	Total for the Presidency ..	241	45,066	44,306	42,581	10,244	9,409	6,478	5,476	6,236	7,281	17,634	19,172	19,525	16,150	18,558	13,561	17,921	14,198	21,397	22,139	
	Ratios per 1,000 living ..	62,077	107·58	52·53	48·90	8·21	8·25	6·17	6·62	9·17	11·99	11·71	12·97	14·01	13·94	23·12	16·96	36·04	28·24	53·06	54·89	
		239·86																				

Annual Form No. V.—DEATHS *registered according to* Classes *in the* Districts *of the* Bombay Presidency *during the year 1884.*

1	2	3					4					5				
		Population according to Census of 1881.					Number of Deaths Registered.					Ratio of Deaths per 1,000 of Population.				
No.	Districts.	Mahomedans.	Hindus.	Christians.	Other Classes.	Total.	Mahomedans.	Hindus.	Christians.	Other Classes.	Total.	Mahomedans.	Hindus.	Christians.	Other Classes.	Total.
	Western Registration District.															
1	Khándesh	92,297	1,143,593	1,146	255	1,237,291	1,951	24,856	6	66	26,879	21·14	21·74	5·24	258·82	21·73
2	Násik	35,494	742,877	2,644	391	781,206	737	18,225	22	210	19,194	20·88	24·56	8·32	537·08	24·57
3	Thána	36,471	728,256	39,089	3,681	807,367	787	17,928	622	104	19,642	21·58	24·62	21·07	29·04	24·33
4	City of Bombay..	158,713	520,069	42,237	32,087	773,196	5,253	14,904	803	1,327	22,287	33·10	28·66	18·97	25·48	28·83
5	Kolába	23,811	455,425	791	2,803	482,830	444	10,030	25	32	10,540	18·65	22·04	31·61	11·41	21·83
	Central Registration District.															
6	Ahmednagar	39,592	706,565	4,831	250	751,228	1,073	17,691	41	344	19,149	27·10	25·03	8·92	..	25·49
7	Poona	42,036	846,811	9,503	2,271	900,621	1,074	19,726	92	440	21,332	25·55	23·29	9·68	193·74	23·69
8	Sholápur..	43,967	537,643	625	252	582,487	1,205	13,193	2	189	14,589	25·13	24·54	3·20	750·00	25·05
9	Sátára	36,713	1,024,626	886	126	1,062,350	875	26,849	6	541	28,271	23·83	26·20	6·77	..	26·61
10	Ratnágiri	71,051	922,745	3,275	19	997,090	1,121	14,563	46	68	15,798	15·78	15·78	14·05	..	15·84
	Southern Registration District.															
11	Belgaum	66,262	791,277	6,322	153	864,014	2,105	25,557	209	122	27,993	31·76	32·29	33·05	..	32·39
12	Dhárwár	100,622	779,875	2,356	54	882,907	3,505	26,280	46	339	30,170	34·83	33·69	19·52	..	34·17
13	Kaládgi	67,066	570,775	625	27	638,493	1,485	14,728	18	96	16,327	22·14	25·80	28·80	..	25·57
14	Kánara	24,232	382,997	14,509	52	421,840	847	11,428	348	37	12,660	34·85	29·84	23·98	..	30·01
	Eastern Gujarát Registration District.															
15	Surat	55,547	545,370	622	12,659	614,198	1,495	15,248	4	292	17,039	26·91	27·95	6·43	23·06	27·74
16	Broach	67,248	266,505	115	3,062	326,930	2,284	9,028	2	179	11,493	33·96	35·19	17·39	58·45	35·15
17	Kaira	72,954	730,661	1,045	133	804,800	2,042	20,933	25	23	23,023	27·99	28·64	23·92	166·67	28·62
18	Panch Mahále	16,060	239,026	44	39	255,479	361	4,582	..	20	4,983	22·72	19·16	..	..	19·50
19	Ahmedabad	83,942	769,966	1,529	887	856,324	2,637	22,651	26	36	25,352	31·41	29·41	18·31	40·58	29·60
	Sind Registration District.															
20	Karáchi	293,117	79,819	4,674	1,078	478,688	6,332	1,985	18	84	8,419	16·10	24·87	3·85	78·14	17·59
21	Hyderabad	621,945	132,190	428	52	754,624	8,651	3,168	..	78	11,897	13·91	23·96	..	...	15·77
22	Thar and Párkar	157,634	45,692	14	4	203,344	1,688	1,106	..	369	3,163	10·71	24·21	..	..	15·55
23	Shikárpur	690,167	162,004	736	73	852,980	11,902	4,175	8	131	16,217	17·24	25·78	10·87	..	19·01
24	Upper Sind Frontier	110,381	13,553	230	12	124,181	1,515	439	..	38	1,992	13·73	32·38	..	..	16·04
	Total for the Presidency..	3,107,171	13,128,587	138,326	80,330	16,454,414	61,359	339,283	2,572	5,165	4,08,409	19·76	25·71	18·59	64·30	24·82

N.B.—This and all the other statements refer to Natives only and not to Europeans and Eurasians. Hindus include Hindus of all castes, Jains, Brahmo or Prárthana Samáj, Sikhs and aboriginals. In the Western, Central, Southern and Gujarát Districts aboriginals are included among Hindus, and in Sind among Mahomedans. "Other Classes" include Jews, Pársis, Buddhists and unspecified.

Annual Form No. VI.—DEATHS *registered from* Different Causes *in the* Districts *and* Towns *of the* Bombay Presidency *during the year 1884.*

1	2	3	4	5	6	7	8					9	10	11							12
							Injuries.							Ratio of Deaths per 1,000 of Population.							
							Suicide.												From all Causes.		
Number.	Districts and Towns.	Population according to Census of 1881.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Male.	Female.	Wounding or Accident.	Snake-bite or killed by wild Beasts.	Total.	All other Causes.	Total Deaths from all Causes.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other Causes.	For the year.	Mean of previous five years.	Number.
	A.—DISTRICTS.																				
	Western Registration District.																				
1	Khándesh	11,87,766	8	96	20,732	4,276	15	16	206	33	270	727	26,108	0·01	0·08	17·45	3·60	0·23	0·61	21·98	25·88	1
2	Násik	7,32,671	44	571	13,729	18,00	2	5	96	8	111	1,427	17,682	0·06	0·78	18·74	2·45	0·15	1·95	24·13	24·50	2
3	Thána	7,80,001	522	523	15,463	267	23	16	222	91	352	1,922	19,049	0·67	0·67	19·82	0·34	0·46	2·46	24·42	22·51	3
4	Kolába	4,59,299	596	269	7,450	323	6	3	117	24	159	1,461	10,189	1·30	0·58	16·22	0·70	0·32	3·05	22·18	19·35	4
	Central Registration District.																				
5	Ahmednagar	704,940	24	50	13,814	1,778	3	14	96	19	132	1,961	17,750	0·03	0·07	19·60	2·52	0·19	2·78	25,19	24·90	5
6	Poona	758,245	6	222	14,268	1,509	13	11	213	44	281	1,744	18,100	0·01	0·29	18·94	2·00	0·37	2·32	24·03	19·53	6
7	Sholápur	489,561	29	208	8,757	845	10	15	96	9	120	1,125	11,084	0·06	0·42	17·88	1·73	0·25	2·30	22·64	21·49	7
8	Sátára	1,010,868	99	1,138	20,612	1,765	11	35	229	60	335	2,932	26,881	0·10	1·12	20·39	1·75	0·33	2·90	25·59	21·54	8
9	Ratnágiri	975,527	132	1,038	7,888	1,024	18	12	194	126	350	4,779	15,211	0·14	1·06	8·09	1·05	0·36	4·89	15·59	18·39	9
	Southern Registration District.																				
10	Belgaum	809,824	2,620	2,302	11,671	4,443	12	31	162	47	259	5,256	26,551	3·23	2·84	14·41	5·49	0·32	5·49	32·78	24·47	10
11	Dhárwár	791,886	3,008	2,304	11,930	4,410	24	36	113	29	202	4,231	26,985	4·93	2·92	15·07	5·57	0·25	5·34	34·08	23·01	11
12	Kaládgi	631,469	1,065	1,767	8,884	1,577	17	21	127	27	192	2,708	16,193	1·69	2·80	14·07	2·49	0·30	4·29	25·04	20·49	12
13	Kánara	397,450	198	1,176	6,588	731	12	12	141	20	186	3,204	11,903	0·27	2·96	16·57	1·84	0·47	8·06	30·17	29·44	13
	Eastern Gujarát Registration District.																				
14	Surat	491,125	147	63	11,280	1,744	15	16	168	47	246	518	13,998	0·30	0·13	22·97	3·55	0·50	1·05	28·50	29·07	14
15	Broach	278,110	477	11	8,247	354	1	6	66	23	96	434	9,619	1·71	0·04	29·65	1·27	0·34	1·56	34·57	32·00	15
16	Kaira	737,186	336	95	16,479	2,509	7	20	181	83	291	1,190	20,909	0·46	0·12	22·35	3·40	0·39	1·61	28·33	29·54	16
17	Panch Mahále	229,743	12	58	3,935	95	2	2	53	37	94	69	4,476	0·08	0·25	17·13	0·41	0·41	0·30	19·48	15·67	17
18	Ahmedabad	684,934	30	233	14,561	1,470	5	15	103	42	165	1,983	17,542	0·04	0·34	21·26	2·15	0·24	1·38	25·61	20·14	18
	Sind Registration District.																				
19	Karáchi	410,356	516	189	5,188	109	1	5	100	67	173	589	6,742	1·26	0·46	12·64	0·26	0·42	1·39	16·43	15·04	19
20	Hyderabad..	709,429	129	730	9,228	69	7	4	183	153	247	305	10,817	0·18	1·04	13·01	0·10	0·49	0·43	15·26	12·14	20
21	Thar and Párkar ..	200,516	..	53	2,770	29	1	2	31	57	91	136	3,079	..	0·26	13·81	0·14	0·45	0·68	15·36	14·55	21
22	Shikárpur	769,913	556	25	12,850	224	7	14	219	96	336	135	14,125	0·72	0·03	16·69	0·29	0·44	0·18	18·35	12·09	22
23	Upper Sind Frontier ..	112,829	107	5	1,547	25	..	..	14	10	24	20	1,728	0·95	0·04	13·71	0·22	0·21	0·18	15·31	6·52	23
	Total of Districts..	14,338,658	11,684	13,205	247,869	31,375	220	301	3,130	1,152	4,803	37,876	346,812	0·81	0·92	17·27	2·19	0·33	2·64	24·17	21·84	

ANNUAL FORM NO. VI.—DEATHS *registered from* DIFFERENT CAUSES *in the* DISTRICTS *and* TOWNS *of the* BOMBAY PRESIDENCY *during the year 1884—continued.*

1	2	3	4	5	6	7	8					9	10	11							12
							Injuries.							Ratio of Deaths per 1,000 of Population.							
							Suicide.												From all Causes.		
Number.	Districts and Towns.	Population according to Census of 1881.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Male.	Female.	Wounding or Accident.	Snake-bite killed by wild Beasts.	Total.	All other Causes.	Total Deaths from all Causes.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other Causes.	For the year.	Mean of previous five years.	Number.
	B.—TOWNS.																					
	Khándesh District.																					
1	Dhulia	18,449	..	..	179	24	..	1	2	..	3	61	267	..	..	9·70	1·30	0·16	3·31	14·47	18·70	1
2	Nandurbár	6,841	..	..	105	36	..	1	1	1	3	3	147	..	..	15·35	5·26	0·44	0·44	21·49	21·05	2
3	Chopda	13,932	..	..	186	..	..	..	1	1	2	..	188	..	..	13·35	..	0·14	..	13·49	18·34	3
4	Nasirabad	10,243	..	..	165	1	1	..	1	..	2	1	169	..	..	16·11	0·10	0·19	0·10	16·50	33·79	4
	Násik District.																					
5	Násik	24,101	32	12	446	105	..	..	11	..	11	254	830	1·33	0·50	17·76	4·35	0·45	10·54	34·43	43·72	5
6	Yeola	17,685	..	16	272	31	..	..	3	..	3	227	549	..	0·90	15·38	1·75	0·17	12·84	31·04	27·89	6
7	Devlali Cantonment ..	2,969	..	..	10	1	..	..	..	..	..	15	26	..	..	3·37	0·34	..	5·05	8·76	19·01	7
8	Málegaon do. ..	3,780	..	..	57	1	..	..	..	..	..	49	107	..	..	15·08	0·26	..	12·96	28·30	35·43	8
	Thána District.																					
9	Thána	14,456	..	..	249	2	..	1	3	..	4	63	318	..	..	17·22	0·14	0·28	4·36	22·00	19·22	9
10	Kalyán	12,910	36	1	133	4	1	..	6	..	7	94	275	2·79	0·08	10·30	0·31	0·54	7·28	21·30	17·52	10
11	City of Bombay	773,196	568	112	6,801	1,672	40	24	237	1	302	12,832	22,287	0·73	0·14	8·80	2·16	0·39	16·60	28·82	30·12	11
	Kolába District.																					
12	Panvel	10,351	2	..	46	1	..	..	3	..	3	15	67	0·19	..	4·44	0·10	0·29	1·45	6·47	23·12	12
13	Alibág	6,376	..	..	57	..	..	..	1	..	1	66	124	..	..	8·94	..	0·16	10·35	19·45	26·23	13
14	Mahád	6,804	29	14	54	1	..	1	1	..	2	60	160	4·26	2·06	7·94	0·14	0·29	8·83	23·52	22·85	14
	Ahmednagar District.																					
15	Ahmednagar	32,903	..	..	374	118	2	1	4	..	7	619	1,118	..	..	11·37	3·58	0·21	18·81	33·97	37·23	15
16	Sangamner	8,796	..	..	115	3	..	1	2	1	4	75	197	..	..	13·08	0·34	0·45	8·53	22·40	28·31	16
17	Ahmednagar Cantonment.	4,689	..	...	24	4	..	1	2	..	3	44	75	..	..	5·23	0·87	0·65	9·59	16·34	18·30	17
	Poona District.																					
18	Poona City	99,622	4	15	1,015	174	7	17	38	..	62	911	2,181	0·04	0·15	10·19	1·75	0·62	9·14	21·89	22·27	18
19	Junnar	10,373	..	..	104	24	..	..	2	..	2	139	269	..	..	10·03	2·31	0·19	13·40	25·93	16·77	19
20	Poona Cantonment ..	30,129	1	1	360	44	1	..	6	..	7	269	682	0·03	0·03	11·95	1·46	0·23	8·93	22·63	14·82	20
21	Kirkee do.	7,252	..	..	39	13	..	..	1	..	1	47	100	..	..	5·38	1·79	0·14	6·48	13·79		21
	Sholápur District.																					
22	Sholápur	59,890	..	136	1,309	100	2	2	6	..	10	504	2,059	..	2·27	21·85	1·67	0·17	8·42	34·38	47·74	22
23	Bársi	18,126	..	20	338	43	1	..	9	1	11	222	634	..	1·24	20·90	2·67	0·68	15·76	39·31	39·87	23
24	Pandharpur	16,910	2	..	488	209	1	2	3	1	7	106	812	0·12	..	28·86	12·36	0·41	6·27	48·02	55·59	24
	Sátára District.																					
25	Sátára	29,028	..	39	391	157	1	..	7	2	10	150	747	..	1·34	13·47	5·41	0·34	5·17	25·73	21·50	25
26	Wái	11,676	..	17	231	37	..	1	1	..	2	84	371	..	1·46	19·78	3·17	0·17	7·19	31·77	24·03	26
27	Karad	10,778	..	23	135	57	..	..	2	..	2	55	272	..	2·13	12·53	5·29	0·19	5·10	25·24	18·24	27
	Ratnágiri District.																					
28	Vengurla	8,947	12	99	36	4	..	..	1	1	2	167	320	1·34	11·06	4·02	0·45	0·22	18·67	35·76	24·10	28
29	Ratnágiri	12,616	..	34	112	6	..	..	1	..	1	114	267	..	2·69	8·88	0·47	0·08	9·04	21·16	20·29	29
	Belgaum District.																					
30	Belgaum	23,115	22	141	204	39	1	..	17	1	19	242	667	0·95	6·10	8·83	1·69	0·82	10·47	28·86	23·98	30
31	Gokák	10,307	44	17	93	72	..	..	2	..	2	86	314	4·27	1·65	9·02	6·99	0·19	8·34	30·46	24·17	31
32	Athni	11,186	5	17	108	108	..	..	9	..	9	56	303	0·45	1·52	9·66	9·66	0·80	5·00	27·09	27·32	32
33	Belgaum Cantonment ..	9,582	10	9	62	27	..	..	4	..	4	46	158	1·04	0·94	6·47	2·82	0·42	4·80	16·49	21·44	33
	Dhárwár District.																					
34	Dhárwár	27,191	142	63	256	11	4	3	4	..	11	313	891	5·22	2·50	9·42	0·40	0·40	11·51	29·46	20·63	34
35	Hubli	36,677	466	103	292	190	3	5	6	..	14	425	1,490	12·71	2·81	7·96	5·54	0·38	11·59	38·99	22·64	35
36	Gadag Bettigeri	17,001	133	43	165	130	1	..	2	1	4	183	663	7·82	2·82	9·71	7·65	0·23	10·76	38·99	18·92	36
37	Ránebennur	10,202	6	20	89	23	..	..	3	1	4	149	291	0·59	1·96	8·72	2·25	0·39	14·61	28·52	18·23	37
	Kaládgi District.																					
38	Kaládgi	7,024	5	33	28	20	1	..	2	..	3	45	134	0·71	4·70	3·99	2·85	0·42	6·41	19·08	24·98	38
	Kánara District.																					
39	Kárwár	13,761	..	10	113	8	..	1	2	1	4	117	252	..	0·73	8·21	0·58	0·29	8·50	18·31	20·73	39
40	Kumta	10,629	..	120	126	23	..	..	1	1	2	144	415	..	11·29	11·85	2·16	0·19	13·65	39·04	48·55	40
	Surat District.																					
41	Surat	109,844	107	..	1,927	49	9	2	21	13	45	769	2,897	0·97	..	17·54	0·45	0·41	7·00	26·37	28·33	41
42	Bulsár	13,229	1	..	89	18	2	..	..	..	2	84	144	0·08	..	6·73	1·36	0·15	2·57	10·89	14·00	42
	Broach District.																					
43	Broach	37,281	126	...	960	1	..	1	11	..	12	270	1,378	3·38	..	25·75	0·03	0·32	7·48	36·96	21·49	43
44	Jambusar	11,479	4	..	181	267	1	..	4	1	6	38	496	0·35	..	15·77	23·26	0·52	3·31	43·21	33·18	44
	Kaira District.																					
45	Kaira	12,640	1	1	303	57	..	..	2	..	2	21	385	0·08	0·08	23·97	4·51	0·16	1·66	30·46	32·22	45
46	Nadiád	28,304	..	2	844	1	2	3	12	1	18	4	869	..	0·07	29·82	0·04	0·63	0·14	30·70	36·12	46
47	Borsad	12,128	37	..	233	2	..	1	1	..	2	1	275	3·02	..	19·05	0·17	0·17	0·08	22·49	22·51	47
48	Kapadvanj	14,442	2	40	401	102	..	1	3	..	4	25	594	1·52	2·77	27·77	7·06	0·28	1·73	41·13	25·26	48

ANNUAL FORM No. VI.—DEATHS *registered from* DIFFERENT CAUSES *in the* DISTRICTS *and* TOWNS *of the* BOMBAY PRESIDENCY *during the year 1884—continued.*

1	2	3	4	5	6	7	8						9	10	11							12
							Injuries.								Ratio of Deaths per 1,000 of Population.							
							Suicide.													From all Causes.		
Number.	Districts and Towns.	Population according to Census of 1881.	Cholera.	Small-pox.	Fevers.	Bowel complaints.	Male.	Female.	Wounding or Accident.	Snake-bite or killed by wild beasts.	Total.	All other causes.	Total deaths from all causes.	Cholera.	Small-pox.	Fevers.	Bowel complaints.	Injuries.	All other causes.	For the year.	Mean of previous five years.	Number.
	B.—TOWN.—*continued.*																					
	Panch Mahâls District.																					
49	Godhra	13,342	24	15	186	10	..	..	4	1	5	20	260	1·80	1·12	13·94	0·75	0·37	1·50	19·49	19·44	49
50	Dohad	12,394	26	1	193	10	1	1	3	4	9	8	247	2·10	0·08	15·57	0·81	0·73	0·64	19·93	20·96	50
	Ahmedabad District.																					
51	Ahmedabad	1,21,767	59	3	4,018	73	..	3	5	1	9	1,966	6,123	0·47	0·02	32·99	0·59	0·07	15·70	49·07	50·92	51
52	Gogha	7,063	..	12	105	79	..	..	5	..	5	2	203	..	1·70	14·87	11·18	0·71	0·28	28·74	24·55	52
53	Viramgám	18,990	27	12	809	237	..	1	5	2	8	70	1,163	1·42	0·63	42·60	12·48	0·42	3·69	61·24	38·04	53
54	Dholka	17,716	..	..	170	66	1	..	..	2	3	52	291	..	..	9·60	3·73	0·17	2·93	16·43	22·96	54
55	Ahmedabad Cantonment..	2,854	..	..	23	1	..	..	..	..	..	6	30	..	..	8·05	0·35	..	2·10	10·51	28·93	55
	Kaira District.																					
56	Karâchi	68,332	1	7	745	74	1	..	20	..	21	829	1,677	0·02	0·10	10·90	1·08	0·31	12·13	24·54	22·74	56
	Hyderabad District.																					
57	Hyderabad	45,195	63	11	671	1	..	..	10	2	12	372	1,080	1·39	0·24	14·85	0·02	0·27	7·13	22·90	26·68	57
	Thar and Párkar District.																					
58	Umarkot	2,828	..	..	74	1	..	..	1	..	1	8	84	..	..	26·17	0·35	0·35	2·83	29·70	37·84	58
	Shikárpur District.																					
59	Shikárpur	42,496	..	2	771	20	2	..	18	..	20	48	861	..	0·05	18·14	0·47	0·47	1·13	20·26	20·19	59
60	Sukkur	27,389	102	1	453	47	1	..	23	..	24	92	719	3·72	0·04	16·54	1·72	0·88	3·36	26·25	15·19	60
61	Lárkhána	13,188	1	..	426	6	..	..	5	2	7	71	511	0·08	..	32·30	0·45	0·53	5·39	38·75	21·69	16
	Upper Sind Frontier District.																					
62	Jacobabad	11,392	..	1	206	23	..	..	2	..	2	32	264	..	0·09	18·15	2·03	0·17	2·82	23·26	17·53	62
	Total of Towns ..	21,05,756	2,120	1,233	29,120	4,908	87	75	562	43	767	23,749	61,597	1·61	0·58	13·83	2·19	0·36	11·28	29·25	29·24	
	Total for the Presidency ..	16,454,414	13,804	14,438	2,78,989	35,983	307	376	3,692	1,195	5,570	61,625	408,409	0·84	0·88	16·83	2·19	0·34	3·74	24·52	22·74	

N.B.—Districts A in this statement do not include the population or deaths of Towns B. In all the other statements "Districts" include Towns.

ANNUAL FORM No. VII.—DEATHS *registered from* CHOLERA *in the Districts of the* BOMBAY PRESIDENCY *during each month of the year 1884.*

1	2	3		4		5												6			7			8	9
		Circles of Registration.		Villages.														Total.			Ratio of Deaths per 1,000 of Population.				
No.	Districts.	Number in each District.	Number from which Deaths from Cholera were reported.	Number in each District.*	Number from which Deaths from Cholera were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Male.	Female.	Total.	Male.	Female.	Total.	Mean ratio per 1,000 of previous five years.	No.
	Western Registration District.																								
1	Khándesh	26	1	2,679	1	..	..	..	..	..	..	..	..	..	8	..	..	2	6	8	..	0·01	0·10	2·32	1
2	Násik	16	4	1,629	10	..	4	4	44	11	..	..	1	6	8	1	..	48	33	76	0·11	0·09	0·10	1·58	2
3	Thána	12	10	1,830	64	5	10	57	6	27	70	16	21	73	88	66	119	290	268	558	0·67	0·71	0·69	0·99	3
4	City of Bombay ..	1	1	..	..	99	32	33	7	70	19	8	73	92	46	49	40	384	174	558	0·55	0·56	0·73	1·50	4
5	Kolába	10	8	1,191	49	86	28	129	106	1	4	30	130	91	14	..	8	317	310	627	1·30	1·30	1·30	0·76	5
	Central Registration District.																								
6	Ahmednagar	14	2	1,321	6	..	..	..	..	20	4	..	..	..	..	..	..	11	13	24	0·03	0·04	0·03	2·79	6
7	Poona	12	4	1,181	2	..	..	..	2	..	..	1	..	..	5	5	..	5	6	11	0·01	0·01	0·01	1·66	7
8	Sholápur	10	6	709	13	..	..	..	..	..	..	..	..	..	15	12	4	15	18	37	0·05	0·06	0·05	1·50	8
9	Sátára	15	6	1,340	17	..	..	..	2	4	..	..	22	53	11	7	..	50	49	99	0·09	0·09	0·09	0·84	9
10	Karnágiri	10	5	1,295	21	3	30	24	12	2	..	33	17	9	3	4	2	68	76	144	0·14	0·15	0·14	0·16	10
	Southern Registration District.																								
11	Belgaum	11	11	1,073	207	7	..	..	..	..	91	416	944	598	319	169	157	1,381	1,320	2,701	3·17	3·07	3·12	0·50	11
12	Dhárwár	18	18	1,281	424	..	..	5	6	55	1,158	1,733	1,023	443	179	52	7	2,478	2,177	4,655	5·69	4·93	5·27	0·04	12
13	Káládgi	9	9	1,140	169	6	1	..	..	..	1	84	397	248	116	129	9	530	540	1,070	1·61	1·68	1·68	0·53	13
14	Kánara	13	4	1,107	13	..	..	..	..	..	..	6	13	11	..	1	77	57	51	108	0·26	0·25	0·26	0·00	14
	Eastern Gujarát Registration District.																								
15	Surat	10	9	789	21	..	..	6	131	108	8	..	..	..	2	..	..	138	117	255	0·45	0·37	0·42	1·25	16
16	Broach	8	8	403	76	1	8	156	72	168	158	43	..	1	..	..	..	357	250	607	2·11	1·57	1·86	0·13	16
17	Kaira	11	9	577	57	..	..	..	..	76	115	189	15	..	..	..	1	229	167	396	0·53	0·44	0·49	0·18	17
18	Panch Mahâls	7	7	673	35	..	..	..	1	3	63	144	63	1	..	..	..	147	128	275	1·12	1·02	1·08	0·92	18
19	Ahmedabad	12	3	867	7	..	..	..	..	5	14	30	27	39	1	..	..	65	51	116	0·14	0·12	0·14	0·29	19
	Sind Registration District.																								
20	Karáchi	14	11	722	96	..	..	..	..	..	..	..	..	..	88	201	128	305	214	517	1·10	1·00	1·02	0·49	20
21	Hyderabad	14	8	1,104	45	..	..	..	..	..	..	..	..	..	73	107	6	121	71	192	0·30	0·20	0·25	0·38	21
22	Thar and Párkar	8	..	72	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·08	22
23	Shikárpur	13	11	1,370	68	..	..	..	..	..	..	..	..	..	529	126	4	460	279	659	0·87	0·66	0·77	0·32	23
24	Upper Sind Frontier ..	4	3	142	23	..	..	..	..	..	..	..	..	..	36	71	..	57	50	107	0·21	0·23	0·88	0·16	24
	Total for the Presidency ..	288	187	24,536	1,417	207	110	414	387	550	1,795	2,738	2,746	1,895	1,626	1,197	756	7,449	6,356	13,804	0·88	0·80	0·84	0·85	

N.B.—In the Census Report the towns and villages for the Presidency are respectively shown as 24,491 and 167, but 55 towns and 7 Cantonments have been selected for registration purposes and the rest are considered as villages

Annual Form No.—VIII.—DEATHS *registered from Small-pox in the* Districts *of the* Bombay Presidency *during each month of the year 1884.*

No.	Districts	Circles of Registration: No. in each District	Circles: No. from which Deaths from Small-pox were reported	Villages: No. in each District	Villages: No. from which Deaths from Small-pox were reported	January	February	March	April	May	June	July	August	September	October	November	December	Total: Males	Total: Females	Total: Total	Children: Under 1 year	Children: Under 12 years	Ratio per 1,000: Males	Ratio: Females	Ratio: Total	Mean Ratio per 1,000 of previous five years	No.
1	2	3		4		5												6			7		8			9	
	Western Registration District.																										
1	Khándesh	26	22	2,679	34	8	16	22	15	7	4	6	1	1	3	2	10	58	40	98	33	65	0·08	0·05	0·08	0·44	1
2	Násik	16	14	1,629	142	36	67	110	106	86	73	36	[illegible]	18	13	15	13	265	334	599	225	314	0·67	0·87	0·77	0·17	2
3	Thána	12	11	1,880	103	66	77	92	90	60	53	18	[illegible]	20	3	7	13	243	281	524	199	292	0·58	0·72	0·65	0·44	3
4	City of Bombay	1	1	..	..	6	11	17	24	29	15	5	2	..	..	1	2	61	51	112	36	45	0·13	0·17	0·14	0·62	4
5	Kolába	10	8	1,191	74	36	19	25	37	42	41	36	14	14	2	5	12	154	129	283	87	138	0·63	0·54	0·59	0·30	5
	Central Registration District.																										
6	Ahmednagar	14	7	1,331	21	4	7	2	4	5	9	2	1	2	3	6	5	24	26	50	26	16	0·06	0·07	0·07	0·10	6
7	Poona	12	9	1,181	105	49	43	42	33	23	32	20	12	8	3	12	26	155	153	308	98	186	0·34	0·34	0·34	0·39	7
8	Sholápur	10	9	709	58	8	15	59	110	61	39	22	6	5	1	15	24	181	183	364	107	248	0·61	0·64	0·63	0·02	8
9	Sátára	15	14	1,340	343	82	148	198	242	222	153	92	52	13	2	4	9	593	624	1,217	381	501	1·11	1·18	1·15	0·07	9
10	Ratnágiri	10	10	1,295	254	197	204	152	197	129	116	83	31	12	16	21	73	606	565	1,171	252	482	1·25	1·08	1·17	0·21	10
	Southern Registration District.																										
11	Belgaum	11	11	1,073	358	323	337	380	307	434	291	138	85	32	27	19	23	1,240	1,246	2,486	526	722	2·85	2·90	2·88	0·12	11
12	Dhárwár	18	18	1,281	430	311	453	520	351	227	228	140	96	88	49	41	39	1,287	1,256	2,543	482	607	2·91	2·85	2·88	0·11	12
13	Kaládgi	9	9	1,140	355	480	490	357	187	111	42	58	22	16	11	14	12	923	877	1,800	702	889	2·91	2.73	2·82	0·21	13
14	Kánara	13	13	1,107	183	69	140	179	195	201	162	91	86	59	40	28	55	696	610	1,306	128	307	3·12	3·07	3·10	0·10	14
	Eastern Gujarát Registration District.																										
15	Surat	10	6	780	28	5	5	5	21	15	7	2	..	3	..	..	..	30	33	63	23	29	0·10	0·11	0·10	0·46	15
16	Broach	8	3	403	3	..	..	3	1	1	2	1	..	4	..	..	..	4	7	11	1	8	0·02	0·04	0·03	0·08	16
17	Kaira	11	8	577	80	..	1	26	59	30	18	4	..	..	..	..	..	75	63	138	53	77	0·18	0·17	0·17	0·01	17
18	Panch Maháls*	7	7	673	28	8	19	14	14	12	..	7	..	..	..	..	..	36	38	74	24	4	0·27	0·31	0·29	0·03	18
19	Ahmedabad	12	10	857	71	3	15	67	94	41	14	3	1	9	..	..	13	133	127	260	95	150	0·30	0·30	0·30	0·02	19
	Sind Registration District.																										
20	Karáchi	14	13	722	92	27	20	15	20	14	25	13	12	2	14	14	20	102	94	196	27	50	0·38	0·44	0·41	0·38	20
21	Hyderabad	14	13	1,104	245	110	124	117	154	93	50	30	17	14	11	15	15	416	334	750	202	230	1·02	0·96	0·99	0·21	21
22	Thar and Párkar	8	6	72	37	7	6	10	13	6	7	3	..	..	..	..	1	35	18	53	8	9	0·31	0·20	0·26	0·03	22
23	Shikárpur	18	9	1,370	15	..	..	..	..	2	5	2	5	8	2	3	1	13	15	28	9	7	0·03	0·04	0·03	0·22	23
24	Upper Sind Frontier	4	3	142	3	..	..	1	..	..	1	..	..	..	..	..	4	5	1	6	1	1	0·07	0·02	0·05	0·25	24
	Total for the Presidency	283	234	24,536	3,072	1,835	2,211	2,413	2,304	1,856	1,387	812	500	328	200	223	300	7,327	7,111	14,438	[illegible]	[illegible]	0·30	0·39	0·38	0·21	

Annual Form No.—IX.—DEATHS *registered from* Fevers *in the* Districts *of the* Bombay Presidency *during each month of the year 1884.*

No.	Districts	Circles of Registration: No. in each District	Circles: No. from which Deaths from Fevers were reported	Villages: No. in each District	Villages: No. from which Deaths from Fevers were reported	January	February	March	April	May	June	July	August	September	October	November	December	Total: Males	Total: Females	Total: Total	Ratio of deaths per 1,000 of population: Males	Ratio: Females	Ratio: Total	Mean Ratio per 1,000 of previous five years	No.
1	2	3		4		5												6			7			8	9
	Western Registration District.																								
1	Khándesh	26	26	2,679	2,326	1,703	1,447	1,627	1,611	1,624	1,147	1,068	1,710	2,003	2,218	2,624	2,500	11,160	10,207	21,367	17·64	16·88	17·27	18·24	1
2	Násik	16	16	1,629	1,254	1,122	888	1,031	927	1,107	971	1,003	1,267	1,356	1,635	1,084	1,493	7,665	6,819	14,484	19·29	17·77	18·54	18·59	2
3	Thána	12	12	1,880	1,880	1,592	1,452	1,377	1,219	1,210	998	887	1,165	1,254	1,206	1,477	2,058	8,139	7,706	15,845	19·56	19·60	19·63	18·10	3
4	City of Bombay	1	1	..	..	660	493	565	582	570	519	497	557	585	605	571	594	3,622	3,179	6,801	7·79	10·31	8·80	9·47	4
5	Kolába	10	10	1,191	849	809	714	713	572	498	499	571	566	671	554	648	792	3,930	3,677	7,607	16·10	15·19	15·75	14·32	5
	Central Registration District.																								
6	Ahmednagar	14	14	1,331	1,279	1,123	820	800	853	909	950	1,097	1,466	1,668	1,567	1,559	1,285	7,561	6,766	14,327	19·81	18·30	19·07	16·73	6
7	Poona	12	12	1,181	1,119	1,045	856	946	1,035	1,131	1,071	1,154	1,583	1,689	1,529	1,825	1,622	8,776	7,010	15,786	17·97	17·48	17·73	18·32	7
8	Sholápur	10	10	709	677	964	721	748	670	774	735	887	1,150	1,059	1,169	1,067	944	5,716	5,176	10,892	19·30	17·99	18·70	18·52	8
9	Sátára	15	15	1,340	1,267	1,430	1,248	1,435	1,550	1,856	1,742	1,818	2,007	2,253	2,006	2,029	1,889	10,704	10,605	21,309	20·10	20·13	20·11	16·21	9
10	Ratnágiri	10	10	1,295	1,140	771	701	754	658	545	606	716	633	607	599	682	679	4,200	3,836	8,036	8·88	7·32	8·06	11·47	10
	Southern Registration District.																								
11	Belgaum	11	11	1,073	996	833	812	1,075	1,121	1,146	1,042	1,078	1,208	987	925	944	967	6,151	5,987	12,138	14·10	13·94	14·05	14·63	11
12	Dhárwár	18	18	1,281	1,224	1,048	924	1,037	958	1,056	970	1,184	1,098	1,147	1,018	1,221	1,171	6,260	6,472	12,732	14·16	14·68	14·42	14·28	12
13	Kaládgi	9	9	1,140	1,032	626	519	635	640	627	776	824	1,018	960	810	819	678	4,482	4,430	8,912	14·11	13·80	13·96	14·52	13
14	Kánara	13	13	1,107	1,011	724	550	608	473	492	529	538	577	523	533	580	650	3,461	3,366	6,827	15·52	16·93	16·18	17·48	14
	Eastern Gujarát Registration District.																								
15	Surat	10	10	780	780	1,859	1,131	1,231	1,049	1,006	826	786	978	902	977	1,577	1,478	6,770	6,526	13,296	22·12	21·18	21·65	21·29	15
16	Broach	8	8	40	393	807	721	959	726	730	539	508	577	604	851	1,223	1,113	4,984	4,404	9,388	29·58	27·79	28·72	26·80	16
17	Kaira	11	11	577	577	1,698	1,203	1,483	1,560	1,664	1,330	1,516	1,492	1,484	1,613	2,056	1,768	9,691	8,569	18,260	22·71	22·66	22·69	25·12	17
18	Panch Maháls	7	7	673	547	347	301	551	410	773	306	296	247	501	326	477	489	2,364	1,950	4,314	18·03	15·69	16·88	14·78	18
19	Ahmedabad	12	12	857	827	1,387	1,632	1,872	1,652	1,400	1,116	1,101	1,499	1,574	1,850	2,424	2,165	10,395	9,286	19,681	23·66	22·26	22·98	23·62	19
	Sind Registration District.																								
20	Karáchi	14	14	722	722	599	643	488	891	426	366	303	293	358	594	703	707	3,247	2,684	5,931	12·21	12·63	12·39	12·03	20
21	Hyderabad	14	14	1,104	1,104	923	989	830	755	585	456	358	365	457	1,093	1,763	1,402	5,390	4,410	9,800	14·29	12·98	13·12	11·00	21
22	Thar and Párkar	8	8	72	72	265	321	362	358	203	171	121	158	195	198	276	264	1,587	1,257	2,844	14·12	13·82	13·89	13·54	22
23	Shikárpur	18	18	1,370	1,370	1,197	1,097	602	579	689	685	571	635	894	2,871	3,008	1,632	7,963	6,587	14,540	17·27	16·68	17·00	11·22	23
24	Upper Sind Frontier	4	4	142	142	82	97	96	85	78	88	84	94	114	341	372	222	973	780	1,753	13·87	14·41	14·11	6·17	24
	Total for the Presidency	283	283	24,536	22,441	22,510	20,290	22,096	20,469	20,673	18,498	15,902	22,273	24,462	27,767	31,512	28,537	144,696	132,393	276,089	17·01	16·64	16·83	11·09	

ANNUAL FORM NO. X.—DEATHS *registered from* BOWEL-COMPLAINTS *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during each month of the year* 1884.

1	2	3		4		5												6			7			8	9
		Circles of Registration.		Villages.														Total.			Ratio of Deaths per 1,000 of Population.				
No.	Districts.	Number in each District.	Number from which Deaths from Bowel-complaints were reported.	Number in each District.	Number from which Deaths from Bowel-complaints were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Males.	Females.	Total.	Males.	Females.	Total.	Mean Ratio per 1,000 of previous five years.	No.
	Western Registration District.																								
1	Khándesh	26	25	2,679	961	374	300	324	293	354	283	283	392	451	429	417	476	2,280	1,956	4,236	3·76	3·23	3·50	3·40	1
2	Násik	16	15	1,629	378	131	128	118	117	166	131	156	186	215	228	184	176	1,052	896	1,948	2·65	2·31	2·48	2·35	2
3	Thána	12	12	1,883	97	18	9	18	22	16	19	33	24	33	24	24	33	150	123	273	0·36	0·31	0·34	0·38	3
4	City of Bombay	1	1	..	..	138	92	110	134	149	165	138	192	150	157	137	140	925	747	1,672	1·99	2·42	2·16	2·67	4
5	Kolába	10	9	1,191	77	12	9	8	10	20	38	32	46	71	40	22	24	198	127	325	0·81	0·52	0·67	0·28	5
	Central Registration District.																								
6	Ahmednagar	14	14	1,331	526	124	88	111	111	107	148	159	208	218	227	200	202	1,028	875	1,903	2·09	2·37	2·23	2·20	6
7	Poona	12	12	1,081	455	141	101	98	111	86	120	122	195	214	199	185	189	998	766	1,764	2·19	1·72	1·96	1·41	7
8	Sholápur	10	10	708	202	99	67	66	65	81	71	102	123	123	139	142	129	699	498	1,197	2·37	1·73	2·05	1·89	8
9	Sátára	15	15	1,310	395	118	88	115	118	112	145	175	248	302	246	186	164	1,116	900	2,016	2·10	1·70	1·90	1·53	9
10	Ratnágiri	10	10	1,296	469	80	78	82	65	63	78	101	104	97	96	115	105	619	415	1,034	1·31	0·79	1·04	1·27	10
	Southern Registration District.																								
11	Belgaum	11	11	1,073	690	343	222	296	308	350	386	404	573	535	460	392	350	2,580	2,109	4,689	5·94	4·91	5·43	3·34	11
12	Dhárwár	14	18	1,781	884	340	289	314	304	313	369	432	543	506	447	439	408	2,535	2,169	4,704	5·73	4·92	5·33	3·48	12
13	Kaládgi	9	9	1,140	393	87	73	76	72	71	95	145	226	227	222	168	135	876	721	1,597	2·76	2·23	2·50	1·40	13
14	Kánara	13	13	1,107	284	77	63	64	67	38	49	50	77	74	69	67	58	483	279	762	2·17	1·40	1·81	2·08	14
	Eastern Gujarát Registration District.																								
15	Surat	10	10	780	343	186	121	126	157	126	133	111	167	122	153	186	223	977	834	1,811	3·19	2·70	2·95	2·52	15
16	Broach	8	8	463	103	52	50	51	43	51	50	45	45	76	52	75	72	352	270	622	2·09	1·70	1·90	1·77	16
17	Kaira	11	11	577	302	178	123	185	194	282	223	299	234	242	222	260	229	1,475	1,199	2,674	3·46	3·16	3·32	2·36	17
18	Panch Mahále	7	7	973	49	11	8	20	11	8	1	6	15	6	7	11	11	54	61	115	0·41	0·46	0·43	0·47	18
19	Ahmedabad	12	12	857	295	144	155	133	157	140	96	111	155	173	179	226	253	1,084	842	1,926	2·47	2·02	2·25	1·51	19
	Sind Registration District.																								
20	Karáchi	14	13	722	69	14	11	8	14	18	7	17	22	15	23	20	14	87	96	183	0·33	0·45	0·38	0·38	20
21	Hyderabad	14	11	1,104	46	5	2	5	2	3	..	1	11	11	7	18	5	32	38	70	0·08	0·11	0·09	0·12	21
22	Thar and Párkar ..	8	7	72	22	2	..	1	2	2	..	2	9	1	3	4	4	28	7	30	0·20	0·08	0·15	0·06	22
23	Shikárpur	18	17	1,370	89	26	10	15	12	11	12	7	22	22	98	42	26	203	94	297	0·41	0·24	0·35	0·24	23
24	Upper Sind Frontier ..	4	3	142	17	8	2	2	..	2	2	3	2	5	5	11	6	27	21	48	0·38	0·39	0·39	0·31	24
	Total for the Presidency.	289	273	24,536	7,140	2,728	2,149	2,321	2,409	2,569	2,556	2,933	3,823	3,849	3,732	3,530	2,384	19,953	16,030	35,983	2·35	2·01	2·19	1·77	

A.—VACCINE DEPARTMENT.

Statement No. I, showing Particulars of Vaccination in the Bombay Presidency during the year 1884-85.

Number.	Circles and Districts.	Population of District according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinations.				Re-vaccination.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE WESTERN REGISTRATION DISTRICT.				Males.	Females.	Total.														
	KHÁNDESH COLLECTORATE—																				
1	Nandurbár Town	6,841	14993·97	...	.....	...	...	Vide	Statement	No.	III.	...	...	...	...	...	...	...	...	10	1·46
2	Dhulia Town	18,449	10023·23	1	P. 426 R. 1	387 ...	813 1	814	813	680	93	804	1	...	98·89	...	43·58	759	41·14	2	0·11
3	Chopda Town, Local Fund ...	13,932	29234·36	1	P. 207 R. 8	194 6	401 14	415	401	270	131	401	14	14	100·	100·	29·79	416	29·86	1	0·07
4	Nasirabad Town do. ..	10,243	61266·54	...	243	217	460	460	460	371	76	448	...	...	97·39	...	43·74	307	29·97	19	1·85
5	In the 22 Rural Circles, Local Fund	1,187,766	119·49	24	P. 17,467 R. 296	17,462 172	34,929 468	1,475	34,962	22,488	11,393	34,255	468	401	98·07	85·68	29·18	33,610	28·30	477	0·40
	Total ...	1,237,231	124·43	26	P. 18,343 R. 305	18,260 178	36,603 483	1,426	36,636	23,809	11,693	35,908	483	415	98·10	85·92	29·36	35,092	28·36	509	0·41
	NÁSIK COLLECTORATE—																				
6	Yeola Town	17,685	80845·71	...	.....	...	...	Vide	Statement	No.	III.	...	...	...	...	...	...	...	...	12	0·68
7	Násik do.	24,101	48528·85	1	P. 337 R. 18	340 2	677 20	697	677	483	190	674	20	18	99·56	90·00	28·71	855	35·48	9	0·37
8	Devláli Cantonment .. Municipal ...	2,969		...	P. 38 R. 3	20 ...	58 3	61	58	41	15	58	3	3	100·	100·	20·55				
	Cantonment .			1	21	26	47	47	47	39	8	47	..	...	100·	...	15·83	125	42·10	...	...
9	Málegaon Cantonment, Local Fund	3,780	...	...	20	30	50	50	50	47	3	50	...	...	100·	...	13·23	122	32·28	...	...
10	In the 12 Rural Circles, Local Fund	732,671	123·36	12	P. 9,310 R. 141	8,992 40	18,302 181	1,540	18,303	11,746	5,675	17,773	181	156	97·11	86·19	24·47	18,380	25·09	135	0·18
	Total ...	781,206	131·52	14	P. 9,726 R. 162	9,408 42	19,134 204	1,381	19,135	12,356	5,891	18,602	204	177	97·22	86·76	24·04	19,482	24·94	156	0·20
	THÁNA COLLECTORATE—																				
11	Kalyán Town	12,910	5164·	1	P. 278 R. 13	230 21	508 34	542	508	329	152	494	34	31	97·24	91·18	40·67	331	25·64	4	0·31
12	Thána do.	14,456	2069·76	1	P. 206 R. 190	188 10	484 200	684	484	322	33	477	200	...	98·55	..	33·00	1,036	71·67	6	0·42
13	In the 10 Rural Circles ... Local Fund ...	780,001	198 65	12	P. 8,372 R. 71	8,114 46	16,986 117	1,384	16,547	8,371	7,385	16,247	117	76	98·55	64·96	20·93	17,393	22·30	404	0·52
	Municipal ...			...	P. 187 R.	167 1	354 1	355	354	247	80	328	1	1	92·66	100·	0·42				
	Total ...	807,367	205·12	14	P. 9,133 R. 274	8,699 78	17,832 352	1,299	17,883	9,269	7,650	17,546	352	108	98·40	30·68	21·87	18,760	23·24	414	0·51

Statement No. I, showing Particulars of Vaccination, &c.—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator	Primary Vaccination.				Revaccinations.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE WESTERN REGISTRATION DISTRICT—*continued.*				Males.	Females.	Total.														
	KOLÁBA COLLECTORATE—																				
14	Panvel Town	10,351	3,450·33	1	P. 131 R. 7	103 1	234 8	242	234	182	24	208	8	6	88·89	75·00	20·67	666	64·34	9	0·87
15	Mahád Town, Local Fund ...	6,804	15,892·55	...	... ..	...	...	*Vide*	Statement	No.	III.	...	...	...	...	...	...	...	...	2	0·29
16	Alibág do. do. ...	6,376	10,544·29	...	.....	..	...	...	Ditto.	...	...	...	...	...	...	...	...	50	7·84	9	1·41
17	In the 7 Rural Circles ... Local Fund.	459,299	255·29	8	P. 6,547 R. 316	6,154 221	12,701 537	1,655	12,734	7,974	4,387	12,746	537	416	93·78	77·47	28·22	10,772	23·45	146	0·32
	Municipal ...			...	P. 104 R. 2	105 ...	209 2	211	209	185	13	198	2	2	94·74	100·	0·44				
	Total ..	482,630	267·76	9	P. 6,782 R. 325	6,362 222	13,144 547	1,521	13,177	8,341	4,424	12,952	547	424	98·54	77·51	27·70	11,489	23·80	166	0·34
	NATIVE STATES—																				
18	Dang Territory, Local Fund...	60,270	15·70	...	677	643	1,320	1,320	1,320	246	841	1,320	...	...	100·	...	21·90	...	...	...	...
19	Jawhár	48,556	90·93	1	P. 622 R. 20	653 17	1,275 37	1,312	1,275	1,005	243	1,275	37	37	100·	100·	27·02	1,882	38·76	...	...
20	Janjira	76,361	234·96	1	P. 939 R. 1	964 ...	1,903 1	1,904	1,906	853	1,007	1,905	1	1	100·	100·	24·96	2,321	30·40	...	...
	TOTALS BY ESTABLISHMENTS IN WESTERN REGISTRATION DISTRICT.																				
	Cantonment	2,969	.....	1	21	26	47	47	47	39	8	47	...	...	100·	...	15·83	...	...	..	...
	Municipal	80,267	5,406·71	5	P. 1,797 R. 234	1,540 35	3,337 269	721	3,337	2,469	600	3,241	269	61	97·12	22·88	41·14	4,230	50·82	30	0·36
	Local Fund	3,285,668	129·11	57	P. 42,843 R. 832	41,806 485	84,649 1,317	1,508	84,767	51,513	29,891	83,040	1,317	1,063	98·10	80·71	25·60	80,592	24·99	1,215	0·38
	Native States	124,917	145·42	2	P. 1,561 R. 21	1,617 17	3,178 38	1,608	3,181	1,858	1,250	3,180	38	38	100·	100·	25·76	4,203	22·70	...	...
	Grand Total ...	3,493,821	132·74	65	P. 46,222 R. 1,087	44,989 537	91,211 1,624	1,428	91,332	55,879	31,749	89,508	1,624	1,162	98·13	71·55	25·95	89,025	25·48	1,245	0·36
	THE PRESIDENCY CIRCLE.																				
21	Bombay City (Municipal) ..	773,196	35,145·27	8	P. 7,937 R. 1,654	8,231 220	16,168 1,874	2,255	16,717	13,449	1,980	15,608	1,874	1,732	96·54	92·42	22·43	18,886	24·43	425	0·55

	THE CENTRAL REGISTRATION DISTRICT.																				
	AHMEDNAGAR COLLECTORATE—																				
22	Ahmednagar Town	32,903	75693·63	1	P. 521	544	1,065	1,089	1,065	665	304	994	9	7	93·33	77·78	30·42	1,157	35·16	27	0·82
					R. 6	3	9														
23	Do. Cantonment ...	4,589			6	9	15		15	9	6	15	...	...	100·	...	0·33	105	22·88	...	...
24	Sangamner Town, Local Fund.	8,796	14814·32	...	P. 203	167	370	371	370	289	80	370	1	1	100·	100·	42·18	331	37·63	1	0·11
					R.	1	1														
25	In the 11 Rural Circles. Local Fund	704,940	105·76	12	P. 12,497	12,376	24,873	2,089	24,873	18,079	6,471	24,083	190	102	99·24	53·68	35·16	21,865	31·02	47	0·07
					R. 134	56	190														
	Municipal ...	...	...	...	136	150	286	286	286	163	98	267	...	...	93·36	...	0·38	...	...	...	...
	Total ...	751,228	112·69	13	P. 13,363	13,246	26,609	2,062	26,609	19,205	6,959	26,329	200	110	98·95	55·00	35·19	23,458	31·23	75	0·10
					R. 140	60	200														
	POONA COLLECTORATE—																				
26	Poona City	99,622	19924·40	2	P. 1,525	1,334	2,859	1,665	2,859	1,768	890	2,674	471	125	93·53	26·54	28·10	2,666	26·76	74	0·74
					R. 399	72	471														
27	Poona and Kirkee Cantonments	37,381	4255·40	1	P. 883	555	1,438	1,747	1,438	1,125	294	1,425	309	173	99·10	55·99	42·75	1,383	37·00	13	0·35
					R. 294	15	309														
28	Junnar Town	10,373	28492·36	...	.....	...	...	*Vide*	Statement	No.	III.	...	...	...	...	...	..	...	...	...	...
29	In the 8 Rural Circles, Local Fund	753,245	141·23	14	P. 9,989	9,936	19,925	1,429	19,951	10,321	8,375	18,869	85	70	94·70	82·35	25·14	15,920	21·14	288	0·38
					R. 58	27	85														
	Total ...	900,621	168·41	17	P. 12,397	11,825	24,222	1,476	24,248	13,214	9,559	22,968	865	368	94·82	42·54	25·91	19,969	22·17	375	0·42
					R. 751	114	865														
	SHOLA'PUR COLLECTORATE—																				
30	Sholápur Town	59,890	44987·79	1	P. 1,088	795	2,083	2,406	2,083	1,299	690	2,052	323	270	98·51	83·59	38·77	2,029	33·88	7	0·12
					R. 287	36	323														
31	Bársí do.	16,126	43002·6	1	417	320	737	737	737	435	275	713	...	...	96·74	...	44·21	921	57·11	4	0·25
32	Pandharpur Town	16,910	33299·69	1	P. 635	607	1,242	1,248	1,242	1,016	214	1,235	6	2	99·44	33·33	73·15	1,464	86·58	...	...
					R. 6	...	6														
33	In the 7 Rural Circles. Local Fund	480,561	108·33	9	P. 9612	9,383	18,995	2,119	19,000	12,546	5,804	18,519	77	62	97·49	80·52	37·95	14,141	28·89	18	0·04
					R. 65	12	77														
	Municipal ...				P. 997	889	1,886	1,963	1,886	1,631	215	1,853	77	48	98·25	62·34	3·88				
					R. 77	...	77														
	Total ...	582,487	128·83	12	P. 12,749	12,194	24,943	2,119	24,948	16,927	7,198	24,372	483	382	97·71	79·09	42·50	18,555	31·85	29	0·05
					R. 435	48	483														
	SÁTÁRA COLLECTORATE—																				
34	Karád Town	10,778	29352·85	...				*Vide.*	Statement	No.	III.	...	...	...	...	...	...	19	1·76	2	0·19
35	Wái do.	11,676	5838·	...			Do.			...	...	...	...	...	...	...	...	...	...	5	0·43
36	Sátára do.	29,028	35319·24	1	P. 367	394	761	1,042	761	558	203	761	281	281	100·	100·	35·90	1,010	34·79	8	0·28
					R. 272	9	281														
37	In the 12 Rural Circles, Local Fund	1,010,868	202·80	14	P. 19,146	18,430	37,576	2,732	37,641	22,850	12,276	35,405	667	472	94·22	70·76	35·49	28,434	28·13	149	0·15
					R. 584	83	667														
	Total ...	1,062,350	212·08	15	P. 19,513	18,824	38,337	2,619	38,402	23,408	12,479	36,166	948	753	94·34	79·43	34·75	29,463	27·73	164	0·15
					R. 856	92	948														

Statement No. I, showing Particulars of Vaccination, &c.—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinations.				Re-vaccinations.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE CENTRAL REGISTRATION DISTRICT—*continued.*				Males.	Females.	Total.														
	RATNÁGIRI COLLECTORATE—																				
38	Vengurla Town, Local Fund...	8,947	336,828·24	...				*Vide* Statement No. III.										115	12·85	27	3·02
39	Ratnágiri do. do. ..	12,616	322,969·60	...	P. 166 R. 23	175 7	341 30	371	344	177	128	316	30	12	92·67	40·00	26·00	236	18·71	16	1·27
40	In the 8 Rural Circles, Local Fund	975,527	248·73	13	P. 12,776 R. 235	12,279 214	25,055 449	1,962	25,101	11,488	12,778	24,867	449	375	99·25	83·52	25·88	23,543	24·13	278	0·28
	Total ...	997,090	254·22	13	P. 12,942 R. 258	12,454 221	25,396 479	1,990	25,445	116,65	12,906	25,183	479	387	99·16	80·79	25·64	23,894	23·96	321	0·32
	NATIVE STATES—																				
41	Akalkot	58,040	116·54	1	P. 1,138 R. 144	975 5	2,113 149	2,262	2,117	1,026	845	2,007	149	134	94·98	89·93	36·89	1,780	30·67	...	...
42	Modnimb	13,773	154·75	...	197	191	388	388	388	270	105	378	...	...	97·42	...	27·45	321	23·31	...	...
	SÁTÁRA JÁGHIRS—																				
43	Pant Pratinidhi	58,916	131·80	1	P. 517 R. 10	453 ...	970 10	980	988	291	533	829	10	4	85·46	40·00	14·14	901	15·29	...	...
44	Pant Sachiv	145,876	97·84	2	P. 931 R. 3	874 ...	1,805 3	904	1,806	779	976	1,798	3	3	99·61	100·	12·35	2,477	16·98	...	...
45	Phaltan...	58,402	147·11	1	P. 540 R. 1	509 1	1,049 2	1,051	1,049	592	425	1,030	2	2	98·19	100·	17·67	1,244	21·30	...	...
46	Jath	55,493	56·68	1	P. 865 R. 60	798 7	1,663 67	1,730	1,664	877	591	1,496	67	49	89·96	73·13	27·84	1,232	22·20	...	...
	Total ...	318,687	96·16	5	P. 2,853 R. 74	2,634 8	5,487 82	1,114	5,507	2,539	2,525	5,153	82	58	93·91	70·73	16·35	5,854	18·37	...	...
47	Sávantvádi	174,433	193·81	2	P. 2,068 R. 1,217	1,997 1,004	4,065 2,221	3,143	4,123	3,133	655	3,879	2,221	1,323	95·42	59·57	29·82	5,127	29·39	...	...
	TOTALS BY ESTABLISHMENTS IN CENTRAL REGISTRATION DISTRICT																				
	Cantonment	37,381	4255·40	1	P. 883 R. 294	555 15	1,438 309	1,747	1,438	1,125	294	1,425	309	173	99·10	55·99	42·75	1,372	36·70	13	0·35
	Municipal	259,068	30,366·95	7	P. 5,692 R. 1,047	5,242 120	10,934 1,167	1,729	10,934	7,544	2,895	10,564	1,167	733	96·62	62·81	43·61	10,816	41·75	122	0·47
	Local Fund	3,997,327	157·20	62	P. 64,389 R. 1,099	62,746 400	1,27,135 1,499	2,075	127,280	75,750	45,912	123,029	1,499	1,094	96·77	72·98	31·05	103,150	25·80	829	0·21
	Native State	564,933	117·52	8	P. 6,256 R. 1,435	5,797 1,017	12,053 2,452	1,813	12,135	6,968	4,130	11,417	2,452	1,515	94·72	61·79	22·89	13,082	23·16	...	...
	Grant Total ...	4,858,709	160·61	78	P. 77,220 R. 3,875	74,340 1,552	151,560 5,427	2,013	151,787	91,387	53,231	146,435	5,427	3,515	96·62	64·77	30·86	128,420	26·43	964	0·19

	THE SOUTHERN REGISTRATION DISTRICT.																					
	BELGAUM COLLECTORATE—																					
48	Gokák Town	10,307	26335·92	...	.....	...	*Vide*	State	ment	III.	...	...	..	...	...	...	...	...	...	2	0·19
49	Athni do.	11,186	12195·58	...	.....	...	...	Do.	...	...	...	...	...	...	...	...	...	...	...	...	...
50	Nipáni do.	9,777	21651·49	1	210	193	403	403	403	217	136	356	...	...	88·34	...	36·41	...	...	...	...
51	Belgaum do.	23,115	51188·93	1	P. 404 R. 64	387 19	791 83	1,163	791	615	79	698	83	35	88·24	42·17	31·71	902	39.02	43	1·86
	Do. Cantonment	9,582	...	...	P. 104 R. 94	90 1	194 95		194	174	8	184	95	77	94·85	81·05	27·24	182	18·99	3	0·31
52 53	In the 7 Rural Circles, Local Fund	800,047	171·88	11	P. 10,962 R. 672	10,799 300	21,761 972	2,067	21,813	11,313	8,952	20,786	972	666	95·52	68·52	26·81	19,591	24·19	260	0·32
	Total ...	864,014	185·54	13	P. 11,680 R. 830	11,469 320	23,149 1,150	1,869	23,201	12,319	9,175	22,024	1,150	778	95·14	67·65	26·39	20,675	23·93	308	0·36
	DHÁRWÁR COLLECTORATE—																					
54	Dhárwár Town...	27,191	23676·52	1	P. 600 R. 39	589 1	1,189 40	1,229	1,189	863	279	1,162	40	34	97·73	85·00	43·99	1,121	41·23	14	0·51
55	Hubli do.	36,677	31090·44	1	P. 674 R. 30	737 5	1,411 35	1,446	1,411	939	336	1,290	35	17	91·43	48·57	35·64	1,266	34·52	3	0·08
56	Gadag Bettigeri Town ...	17,001	61127·19	1	P. 704 R. 19	677 1	1,381 20	1,401	1,381	1,093	188	1,287	20	9	93·19	45·00	76·23	1,026	60·35	7	0·41
57	Ránebennur do. Local Fund.	10,202	27666·44	1	P. 595 R. 18	568 22	1,163 40	1,203	1,163	749	371	1,145	40	38	98·45	95·00	115·96	757	74·20	6	0·59
58	In the 14 Rural Circles, do. ..	791,836	174·73	14	P. 13,174 R. 609	12,606 110	25,780 719	1,893	25,824	13,986	9,862	24,542	719	453	95·20	63.00	31·57	15,866	20·04	329	0·42
	Total ...	882,907	194·70	18	P. 15,747 R. 715	15,177 139	30,924 854	1,765	30,968	17,630	11,036	29,426	854	551	95·16	64·52	33·95	20,036	22·69	359	0.41
	KALÁDGI COLLECTORATE—																					
59	Bágalkot Town...	12,850	42174·36	1	P. 428 R. 23	459 ...	887 23	910	889	685	96	785	23	12	88·50	52·17	62·02	849	66·07	...	...
60 61	Kaládgi do. Local Fund ... Do. Cantonment, do. ...	7,024	59938·13	...	24	22	46	46	46	32	10	42	...	...	91·30	...	0·60	156	22·21	4	0·57
62	In the 8 Rural Circles, do. ...	618,619	107·46	8	P. 11,293 R. 219	10,875 11	22,168 230	2,675	22,175	12,018	8,845	21,339	230	189	96·26	82·17	34·80	12,619	20·40	393	0·64
	Total ...	638,493	110·90	9	P. 11,745 R. 242	11,356 11	23,101 253	2,595	23,110	12,735	8,951	22,166	253	201	95·95	79·45	35·03	13,624	21·34	397	0·62
	KÁNARA COLLECTORATE—																					
63	Kárwár Town	13,761	1169·44	1	P. 566 R. 101	424 30	990 131	1,121	1,000	234	334	838	136	73	84·65	55·73	66·20	173	12·57	1	0·07
64	Kumta do. Local Fund ...	10,629	1445·82	...	P. 188 R. 15	164 7	352 22	374	353	141	142	305	22	15	86·65	68·18	30·11	127	11·95	25	2·35
65	In the 11 Rural Circles, Local Fund.	397,450	102·13	13	P. 4,972 R. 686	4,707 253	9,679 939	817	9,709	2,111	5,161	8,922	943	646	92·18	68·80	24·01	9,767	24·57	92	0·23
	Total ...	421,840	107·87	14	P. 5,726 R. 802	5,295 290	11,021 1,092	865	11,062	2,486	5,637	10,065	1,101	734	91·33	67·22	25·60	10,067	23·86	118	0·28

Statement No. I. showing particulars of Vaccination, &c.—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons Vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinations.				Re-vaccination.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE SOUTHERN REGISTRATION DISTRICT—*continued.*				Mals.	Females.	Total.														
	Southern Marátha Jágh'rs—																				
66	Sángli	196,832	219·68	5	P. 2,180 R. 118	1,960 5	4,140 123	853	4,158	1,984	1,675	3,795	123	88	91·67	71·54	19·73	3,097	15·73	...	...
67	Jamkhandi	83,917	170·56	2	P. 1,930 R. 12	1,841 ...	3,771 12	1,891	3,771	2,370	1,215	3,672	12	7	97·37	58·33	43·84	2,870	34·20	...	...
68	Miraj (Senior)	55,959	222·94	2	P. 1,212 R. 82	1,182 21	2,394 103	1,248	2,418	1,106	990	2,151	103	68	89·85	66·02	39·65	1,448	25·88	...	...
69	Do. (Junior)	36,541	146·83	2	P. 344 R. 11	344 1	688 12	350	697	407	236	656	12	6	95·35	50·00	21·68	528	17·29	..	...
70	Kurundvád (Elder)	35,187	193·33	1	P. 403 R. 49	429 3	832 52	884	851	390	380	778	52	35	93·51	67·31	23·11	634	18·01	...	...
71	Do. (Younger)... ..	25,811	226·41	1	P. 451 R. 46	502 14	953 60	1,013	953	397	479	876	60	46	91·92	76·67	35·72	626	24·25	...	...
72	Mudhol	52,163	144·10	1	P. 1,158 R. 5	1,236 1	2,394 6	2,400	2,394	1,448	807	2,278	6	2	95·15	33·33	43·71	1,371	26·28	...	...
73	Rámdurg	29,570	211·21	1	P. 549 R. 20	530 1	1,079 21	1,100	1,079	719	249	987	21	6	91·47	28·57	33·58	796	26·92	...	...
	Total ...	509,980	192·81	15	P. 8,227 R. 343	8,024 46	16,251 389	1,109	16,321	8,821	6,031	15,193	389	258	93·49	66·32	30·30	11,370	22·29	...	...
	Under the Dhárwár Agency—																				
74	Sávanur State	14,763	210·90	1	P. 577 R. 29	524 15	1,101 44	1,145	1,101	573	499	1,100	44	23	99·91	52·27	76·07	775	52·50	...	...
75	Kolhápur States	800,189	284·16	12	P. 11,321 R. 546	10,902 146	22,223 692	1,910	22,303	12,911	7,888	21,208	692	516	95·43	74·57	27·15	18,693	23·36	...	...
	TOTALS BY ESTABLISHMENTS IN SOUTHERN REGISTRATION DISTRICT.																				
	Municipal	149,954	9624·00	7	P. 3,690 R. 370	3,556 57	7,246 427	1,096	7,258	4,820	1,456	6,600	432	257	91·08	60·19	45·73	5,471	39·03	71	0·51
	Local Fund	2,657,300	141·02	47	P. 41,208 R. 2,219	39,741 703	80,949 2,922	1,784	81,083	40,350	33,343	77,081	2,926	2,007	95·22	68·69	29·76	58,931	22·10	1,111	0·42
	Native State	1,324,932	239·55	28	P. 20,125 R. 918	19,450 207	39,575 1,125	1,454	39,725	22,305	14,418	37,501	1,125	797	94·76	70·84	28·91	30,842	23·28	...	...
	Grand Total ...	4,132,186	169·42	82	P. 65,023 R. 3,507	62,747 967	127,770 4,474	1,613	128,066	67,475	49,217	121,182	4,483	3,061	94·84	68·42	30·07	95,244	23·05	1,182	0·29
	THE EASTERN GUJARÁT REGISTRATION DISTRICT.																				
	Surat Collectorate—																				
76	Bulsár Town	13,229	5291·60	...	.....	...	...	*Vide* Statement No. III.					...	...	...	...	...	...	...	2	0·15
77	Surat do.	109,844	36614·66	2	P. 1,608 R. 91	1,509 4	3,175 95	1,695	3,120	2,725	279	3,015	95	34	96·79	35·79	27·73	2,397	21·92	178	1·62

78	In the 8 Rural Circles, Local Fund	491,125	296·39	9	P. 7,079 R. 76	6,874 36	13,953 112	1,563	14,034	8,348	4,795	13,359	112	54	95·81	48·21	27·31	13,100	26·67	112	0·23
	Total ...	614,198	369·44	11	P. 8,685 R. 167	8,383 40	17,068 207	1,570	17,156	11,073	5,074	16,374	207	88	95·93	42·51	26·80	15,497	25·23	292	0·48
	BROACH COLLECTORATE—																						
79	Broach City	37,281	22133·43	1	P. 605 R. 20	617 2	1,222 22	1,244	1,226	954	182	1,139	22	12	93·21	54·55	30·87	907	24·33	21	0·56
80	Jambusar Town, Local Fund.	11,479	21110·80		180	174	354	354	354	243	86	334	...	...	94·35	...	29·10	81	7·06	...	...
81	In the 6 Rural Circles, Local Fund	278,170	191·73	5	P. 4,674 R. 654	4,508 41	9,182 695	1,975	9,300	6,402	2,332	8,776	695	384	95·58	56·69	32·93	7,517	27·02	8	0·03
	Total ...	326,930	224·99	6	P. 5,459 R. 674	5,299 43	10,758 717	1,912	10,880	7,599	2,600	10,249	717	396	95·27	55·23	32·56	8,505	26·01	29	0·09
	KAIRA COLLECTORATE—																						
82	Borsad Town	12,228	64146·89	...	.....	...	...	*Vide*	Statem	ent No.	III.	...	...	...	...	..	...	42	3·43	...	...
83	Kapadvanj Town	14,442	63307·40	...	.....	...	...	...	...	..	...	...	...	...	...	...	...	...	...	3	0·21
84	Nadiád do.	28,304	85044·88	1	P. 556 R. 38	490 ...	1,046 38	1,084	1,047	820	181	1,005	38	9	96·08	23·70	35·83	893	31·55	...	...
85	Kaira do. Local Fund.	12,640	44942·22	...	P. 200 R. 1	185 ...	385 1	386	385	277	86	364	1	1	94·55	100·	28·88	285	22·55	1	0·08
86	In the 7 Rural Circles, Local Fund	737,186	458·57	8	P. 11,995 R. 91	9,758 7	21,753 98	2,731	21,827	15,685	5,490	21,238	98	68	97·63	69·39	28·90	18,279	24·80	6	0·01
	Total ...	804,800	500·31	9	P. 12,751 R. 130	10,433 7	23,184 137	2,591	23,259	16,782	5,757	22,607	137	78	97·51	56·93	28·19	19,499	24·23	10	0·01
	PANCH MAHÁLS—																						
87	Godhra Town	13,342	79802·62	...	P. 218 R. 264	188 7	406 271	677	406	334	61	405	271	192	99·75	70·85	44·75	...	...	6	0·45
88	Dohad do. Local Fund ...	12,394	74132·64	...	P. 161 R. 2	137 ...	298 2	300	298	213	77	292	2	2	97·99	100	23·72	438	35·34	2	0·16
89	In the 5 Rural Circles, Local Fund	229,743	142·43	6	P. 4,326 R. 150	4,056 81	8,382 231	1,435	8,419	5,179	2,755	8,180	231	165	97·59	71·43	36·32	6,656	28·97	8	0·03
	Total ...	255,479	158·35	6	P. 4,705 R. 416	4,381 88	9,086 504	1,598	9,123	5,726	2,893	8,877	504	359	97·70	71·23	36·15	7,094	27·77	16	0·06
	AHMEDABAD COLLECTORATE—																						
90	Dholka Town	17,716	23621·33	1	P. 416 R. 23	360 ...	776 23	799	778	686	42	734	23	21	94·59	91·30	42·62	527	29·75	...	...
91	Ahmedabad City	124,767	57722·57	2	P. 2,217 R. 46	2,064 13	4,281 59	2,204	4,312	3,616	537	4,164	59	36	97·27	61·02	33·66	4,090	32·78	...	...
92	Ahmedabad Cantonment ..	2,854			34	34	68		68	67	1	68	...	...	100·	...	23·83	77	26·98	...	...
93	Gogha Town, Local Fund ...	7,063	9417·33	...	P. 150 R. 4	152 5	302 9	311	302	243	47	293	9	3	97·02	33·33	41·91	275	38·94	1	0.14
94	Viramgám Town, Local Fund .	18,990	30925·19	...	313	280	593	593	593	511	59	570	...	...	96·12	...	30·02	584	30·75	3	0·16
95	In the 7 Rural Circles. Municipal ...	684,934	179·45	11	76	59	135	135	135	116	17	133	...	...	98·52	...	0·19	18,165	26·52	35	0·05
	Local Fund .				P. 11,394 R. 305	10,646 51	22,040 356	2,066	22,167	17,379	3,967	21,412	356	187	97·15	52·53	31·53				
	Total ...	856,324	224·10	14	P. 14,600 R. 378	13,595 69	28,195 447	2,046	28,355	22,618	4,670	27,374	447	247	97·09	55·26	32·26	23,718	27·70	39	0·05
96	Rewa Kántha States	543,452	113·41	12	P. 9,498 R. 158	8,887 33	18,385 191	1,548	18,438	6,930	9,596	17,958	192	144	97·68	75·39	33·31	14,002	25·76	...	...
97	Mahi Kántha States	517,485	46 84	5	P. 4,915 R. 11	4,338 2	9,253 13	1,858	9,321	4,850	3,916	8,948	13	8	96·70	61·54	17·31	10,300	19·90	...	...
98	Cambay	86,074	245·93	1	P. 632 R. 3	518 1	1,150 4	1,154	1,154	519	575	1,106	4	1	96·17	25·00	12·86	1,591	18·48	...	...
99	Surat Agency. Dharampor .	101,289	127·57	2	1,141	1,080	2,221	1,110	2,221	366	1,462	2,103	...	...	94·69	...	20·76	2,668	26·34	...	...
100	Bánsda ..	34,122	88·86	1	P. 662 R.....	603 1	1,265 1	1,266	1,272	581	575	1,219	1	1	96·36	100	35·75	1,223	35·84	...	...
101	Sachín Local Fund.	15,721	374·31	...	P. 190 R. 2	180 ...	370 2	372	370	229	110	344	2	1	92·97	50·00	21·95	533	33·90	...	...
102	Jámbughoda Local Fund ...	6,440	45·03	...	6	13	19	19	20	10	4	14	...	...	73·68	..	2·17	190	29·50	...	...

Statement No. I., showing Particulars of Vaccination, &c.—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinations.				Re-vaccinations.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1000.
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	TOTALS BY ESTABLISHMENTS IN EASTERN GUJARAT REGISTRATION DISTRICT.				Males.	Females.	Total.														
	Municipal	320,766	40205·69	7	P. 5,510 R. 218	5,133 19	10,643 237	1,554	10,686	8,984	1,239	10,258	237	112	96·38	47·26	32·33	9,282	25·82	199	0·62
	Local Fund	2,559,126	247·60	39	P. 40,886 R. 1,549	37,151 228	78,037 1,777	2,047	78,477	55,053	19,869	75,581	1,777	1,057	96·85	59·48	29·95	65,754	25·69	187	0·07
	Native State	1,282,422	73·84	21	P. 16,848 R. 172	15,426 37	32,274 209	1,547	32,406	13,246	16,124	31,334	210	154	97·09	73·68	24·55	29,784	23·22	...	...
	Grand Total ...	4,162,314	150·20	67	P. 63,244 R. 1,939	57,710 284	120,954 2,223	1,838	121,569	77,283	37,232	117,173	2,224	1,323	96·87	59·51	28·47	104,820	25·18	386	0·09
	THE WESTERN GUJARAT CIRCLE—KÁTHIÁWÁR STATES.																				
103	Jhálávád Pránt. — Limbdi	43,063	153·80	1	P. 1,309 R. 526	1,214 314	2,523 840	3,363	2,534	991	1,095	2,120	840	352	84·03	41·90	57·40	1,529	35·51	...	...
104	Jhálávád Pránt. — Dhrángadra	99,686	87·29	1	P. 952 R. 297	911 237	1,863 534	2,397	1,867	1,194	599	1,823	534	433	97·85	81·09	22·63	2,104	21·11	...	...
105	Jhálávád Pránt. — In four other States...	296,880	103·44	4	P. 4,638 R. 2,850	4,465 2,165	9,103 5,015	3,529	9,115	5,674	2,893	8,595	5,015	3,189	94·42	63·59	39·69	8,317	28·01	...	...
	Total ...	439,629	102·43	6	P. 6,899 R. 3,673	6,590 2,716	13,489 6,389	3,313	13,516	7,859	4,587	12,538	6,389	3,974	92·95	62·20	37·56	11,950	27·18	...	...
106	Hálár Prant. — Rájkot	61,809	229·77	1	P. 1,326 R. 155	1,278 61	2,604 216	2,946	2,604	1,904	690	2,597	216	200	99·73	92·59	45·25	2,278	36·86	...	...
107	Hálár Prant. — Do. Cantonment...	6,013	2696·41		P. 53 R. 7	63 3	116 10		116	97	19	116	10	7	100·	70·00	20·46	189	31·43	...	...
108	Hálár Prant. — Gondál	135,604	197·41	2	P. 1,550 R. 845	1,623 627	3,173 1,472	2,322	3,173	2,247	634	2,918	1,472	801	91·96	54·42	27·43	3,672	27·08	...	...
109	Hálár Prant. — Morví	89,964	121·57	1	P. 1,300 R. 911	1,302 609	2,602 1,520	4,122	2,610	1,658	621	2,309	1,521	979	88·74	64·41	36·55	2,309	25·67	...	...
110	Hálár Prant. — Navánagar	316,147	93·16	3	P. 4,586 R. 897	4,310 667	8,896 1,564	3,487	8,917	3,884	3,313	7,335	1,564	863	82·45	55·18	25·93	6,159	19·48	...	...
111	Hálár Prant. — In three other States.	74,790	207·13	3	P. 3,876 R. 683	3,703 389	7,579 1,072	2,884	7,593	3,925	3,062	7,046	1,072	832	92·97	77·61	105·33	6,024	80·55	...	...
	Total ...	684,327	116·93	10	P. 12,691 R. 3,498	12,279 2,356	24,970 5,854	3,082	25,013	13,715	8,339	22,321	5,855	3,682	89·39	62·90	38·00	20,631	30·15	...	...

112	Soráth Pránt.	Junágad	387,499	101·97	4	P. 3,861 R. 1,050	3,868 674	7,729 1,724	2,363	7,763	3,705	2,868	6,797	1,724	1,009	67·94	58·53	20·14	5,886	15·19	...	...
113		Jetpur...	92,553	165·27	1	P. 869 R. 209	875 216	1,744 425	2,169	1,744	1,026	461	1,508	425	284	86·47	58·56	19·36	1,619	17·49	...	...
114		Porbandar	71,072	125·42	1	P. 1,002 R. 358	1,012 49	2,014 407	2,421	2,015	1,237	534	1,846	407	338	91·66	83·05	30·73	1,637	23·03	...	...
115		Bántva	38,517	189·46	1	P. 1,302 R. 636	1,343 416	2,645 1,052	3,697	2,645	1,340	1,159	2,621	1,052	792	99·09	75·29	88·61	2,267	58·86	...	...
116		In four other States ...	50,139	196·74	4	P. 3,949 R. 1,944	3,810 1,410	7,762 3,354	2,779	7,766	4,418	2,743	7,302	3,354	2,793	94·07	83·27	201·34	6,930	138·22	...	...
		Total ...	639,780	118·81	11	P. 10,983 R. 4,197	10,911 2,765	21,894 6,962	2,623	21,933	11,726	7,815	20,074	6,962	5,216	91·69	74·92	39·53	18,339	28·66	...	...
117	Gohelvád Pránt.	Bhávnagar	420,708	147·10	6	P. 6,884 R. 1,571	6,754 954	13,638 2,525	2,694	13,679	9,783	4,191	12,150	2,526	1,358	89·09	53·58	32·11	11,857	28 18	...	...
118		Pálitána	62,122	203·68	1	P. 992 R. 435	1,043 429	2,035 864	2,899	2,047	955	524	1,485	865	215	72·97	24·88	27·37	1,761	28·35	...	...
119		Vala	68,296	151·10	1	P. 1,049 R. 182	960 158	2,009 340	2,349	2,009	903	466	1,422	340	156	70.78	45·88	23·02	1,707	24·99	...	..
120		Jasdan	29,037	263·97	1	P. 1,101 R. 502	993 391	2,094 893	2,987	2,106	935	851	1,824	893	372	87·11	41·66	75·63	1,264	43·53	...	...
		Total ...	580,163	155·66	9	P. 10,026 R. 2,690	9,750 1,932	19,776 4,622	2,711	19,841	10,576	6,032	16,881	4,624	2,101	85·36	45·46	32·72	16,589	28·59	...	...
	Káthiáwár States, T tal ..		2,343,899	147·69	37	P. 40,599 R. 14,058	39,530 9,769	80,129 23,827	2,810	80,303	43,876	26,773	71,814	23,830	14,973	89·62	62·84	37·03	67,509	28·80	...	...
	PÁLANPUR STATES—																					
121		Deesa	49,821	57·66	1	P. 755 R. 18	713 6	1,468 24	1,703	1,477	1,194	164	1,364	25	18	92·92	75·00	27·74	2,097	42·09	...	...
122		Do. Cantonment	8,376	33295·90		P. 111 R. 2	98 ...	209 2		209	157	13	172	2	1	82·30	50·00	20·65	381	45·49	...	...
123		Pálanpur	184,581	80·75	2	P. 3,242 R. 197	3,002 174	6,244 371	3,307	6,232	3,162	2,593	5,780	371	251	92·57	67·65	32·67	4,274	23·16	...	...
124		Rádhanpur	98,129	85·33	1	P. 1,234 R. 76	991 53	2,225 129	2,354	2,225	1,201	849	2,083	129	98	93·62	75·97	22·23	1,523	15·52	...	...
125		In three other States	235,571	63·67	3	P. 4,363 R. 390	4,149 407	8,512 797	3,103	8,512	5,141	2,848	8,008	797	557	94·08	69·89	36·36	7,185	30·50	...	...
		Total ...	576,478	72·08	7	P. 9,705 R. 683	8,953 640	18,658 1,323	2,854	18,675	10,855	6,467	17,407	1,324	925	93·30	69·92	31·80	15,460	26·82	...	...
	TOTALS BY ESTABLISHMENTS IN WESTERN GUJARÁT CIRCLE.																					
		Government	126,019	110·98	2	P. 2,245 R. 182	2,152 70	4,393 252	2,322	4,406	3,346	892	4,249	253	226	96·63	89·68	35·51	4,945	39·24	...	...
		Native State	2,794,358	106·98	42	P. 48,059 R. 14,559	46,331 10,339	94,390 24,898	2,840	94,572	51,385	32,348	84,972	24,901	15,672	90·02	62·84	36·02	78,024	27·92	...	...
		Grand Total ...	2,920,377	107·14	44	P. 50,304 R. 14,741	48,483 10,409	98,787 25,150	2,817	98,978	54,731	33,240	89,221	25,154	15,898	90·32	63·21	36·00	82,969	28·41	...	...
	THE SIND REGISTRATION DISTRICT.																					
	KARA'CHI COLLECTORATE—																					
126		Karáchi Town	58,332	3416·60	2	P. 1,862 R. 737	1,624 97	3,486 854	2,170	3,534	3,003	353	3,454	854	546	99·08	63·93	58·54	4,884	71·47	23	0·34
127		In the 13 Rural Circles, Local Fund.	410,356	29·11	10	P. 6,756 R. 1,050	5,577 1,027	12,333 2,077	1,441	12,367	8,183	3,250	11,905	2,078	1,482	96·53	71·35	32·62	14,834	36·15	94	0.23
		Total ...	478,688	33·91	12	P. 8,618 R. 1,807	7,201 1,124	15,819 2,931	1,562	15,901	11,186	3,603	15,359	2,932	2,028	97·09	69·19	36·32	19,718	41·19	117	0·24

Statement No. I, showing Particulars of Vaccination, &c.,—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinations.				Re-vaccinations.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE SIND REGISTRATION DISTRICT—*continued.*				Males.	Females.	Total.														
	HYDERABAD COLLECTORATE—																				
128	Hyderabad Town	45,195	..	1	P. 752 R. 265	508 11	1,260 276	1,536	1,261	1,112	125	1,237	276	182	98·17	65·94	31·40	1,930	42·70	41	0·91
129	In the 13 Rural Circles, Local Fund	709,429	78·57	13	P. 10,764 R. 1,354	8,530 544	19,234 1,898	1,626	19,316	13,904	3,626	17,839	1,898	1,126	92·75	59·33	26·73	23,021	32·45	177	0·25
	Total ...	754,624	83·57	14	P. 11,456 R. 1,619	9,038 555	20,494 2,174	1,619	20,577	15,016	3,751	19,076	2,174	1,308	93·08	60·17	27·01	24,951	33·06	218	0·29
	THAR AND PARKAR—																				
130	Umarkot Town	2,828	...	...	.....	...	...	*Vide* Statement No. III.			...	...	...	..	...	...	...	...	...	...	...
131	In the 7 Rural Circles, Local Fund	200,516	15·75	7	P. 4,655 R. 1,496	3,912 2,835	8,567 4,331	1,843	8,588	5,582	2,315	8,086	4,331	2,836	94·39	65·48	54·47	13,307	66·36	11	0·05
	Total ...	203,344	15·97	7	P. 4,655 R. 1,496	3,912 2,835	8,567 4,331	1,843	8,588	5,582	2,315	8,086	4,331	2,836	94·39	65·48	53·71	13,307	65·44	11	0·05
	SHIKÁRPUR COLLECTORATE—																				
132	Shikárpur Town	42,496	4473·26	1	P. 747 R. 846	745 1	1,492 847	2,339	1,492	1,324	100	1,431	847	249	95·91	29·10	39·53	1,979	46·57	10	0·24
133	Sukkur do.	27,389	9129·66	2	P. 1,165 R. 518	280 470	1,445 988	1,216	1,445	1,234	172	1,408	988	943	97·45	95·45	85·84	2,639	96·35	4	0·15
134	Lárkhána do.	13,188	2198·	1	P. 289 R. 49	184 9	473 58	531	473	429	20	454	58	51	95·98	87·93	38·29	377	25·55	...	...
135	In the 15 Rural Circles, Local Fund	751,551	76·76	16	P. 13,217 R. 2,190	11,451 3,094	24,668 5,284	1,872	24,823	19,464	3,480	23,171	5,304	3,242	93·93	61·36	35·14	30,753	40·92	162	0·21
	Total ...	834,624	85 09	20	P. 15,418 R. 3,603	12,660 3,574	28,078 7,177	1,763	28,233	22,451	3,772	26,464	7,197	4,485	94·25	62·49	37·08	35,748	42·83	176	0·21
	UPPER SIND FRONTIER—																				
136	Jacobabad Town and Cantonment.	11,352	...	...	.....	...	...	*Vide* Statement No. III.			...	...	...	...	...	...	...	86	7·58	2	0·18
137	In the 4 Rural Circles, Local Fund	131,191	56·28	4	P. 3,089 R. 690	2,679 1,364	5,768 2,054	1,955	5,779	3,994	1,365	5,416	2,070	1,322	93·90	64·36	51·36	6,552	49·94	26	0·23
	Total ...	142,543	61·16	4	P. 3,089 R. 690	2,679 1,364	5,768 2,054	1,955	5,779	3,994	1,365	5,416	2,070	1,322	93·90	64·36	47·26	6,638	46·57	28	0·23
	NATIVE STATE—																				
138	Khairpur State	129,153	21·14	3	P. 1,888 R. 57	1,545 27	3,433 84	1,172	3,433	1,926	819	3,362	84	74	97·93	88·10	26·60	2,580	19·98	...	...

	TOTALS BY ESTABLISHMENTS IN SIND REGISTRATION DISTRICT.																					
	Municipal	196,600	5782·35	7	P. 4,815 R. 2,435	3,341 588	8,156 3,023	1,597	8,205	7,102	770	7,984	3,023	1,971	97·89	65·20	50·64	11,895	60·50	79	0·40
	Local Fund	2,217,223	46·21	50	P. 38,421 R. 6,780	32,149 8,864	70,570 15,644	1,724	70,873	51,127	14,036	66,417	15,681	10,008	94·12	63·97	34·47	88,468	39·90	471	0·21
	Native State	129,153	21·14	3	P. 1,888 R. 57	1,545 27	3,433 84	1,172	3,433	1,926	819	3,362	84	74	97·93	88·10	26·60	2,580	19·97	...	...
	Grand Total ...	2,542,976	46·99	60	P. 45,124 R. 9,272	37,035 9,479	82,159 18,761	1,682	82,511	60,155	15,625	77,763	18,788	12,053	94·65	64·28	35·32	102,943	40·48	550	0·22
	THE BARODA CIRCLE.																					
139	Baroda States	2,185,005	254·96	31	P. 34,057 R. 237	30,490 46	64,547 283	2,091	64,803	52,399	8,951	61,620	283	210	95·46	74·20	28·30	57,388	26·26	...	...
	THE CUTCH CIRCLE.																					
140	Cutch States	512,084	78·78	17	P. 10,555 R. 153	9,931 35	20,486 188	1,216	20,667	12,238	7,007	20,315	201	170	99·17	90·43	40·00	18,017	35·02	...	...
	ADEN.																					
141	Aden Municipality...	34,860	2962·07	1	P. 299 R. ...	112 1	411 1	412	411	49	187	327	1	1	79·56	100·	9·41	656	18·82	...	...
	TOTAL OF THE BOMBAY PRESIDENCY. BY ESTABLISHMENTS.																					
	Government	126,019	110·98	2	P. 2,245 R. 182	2,152 70	4,397 252	2,324	4,406	3,346	892	4,249	253	226	96·63	89·68	35·51	4,945	39·24	...	...
	Municipal	1,814,711	15838·85	42	P. 29,740 R. 5,958	27,155 1,040	56,895 6,998	1,521	57,548	44,417	9,127	54,582	7,003	4,867	95·93	69·55	32·76	61,236	33·87	926	0·51
	Cantonment	40,350	4593·38	2	P. 904 R. 294	581 15	1,485 309	897	1,485	1,164	302	1,472	309	173	99·12	55·99	40·77	1,372	36·70	13	0·35
	Local Fund	14,716,644	114·94	255	P. 227,747 R. 12,479	213,593 10,680	441,340 23,159	1,822	442,480	273,793	143,051	425,148	23,200	15,229	96·33	65·76	29·92	396,896	27·06	3,813	0·26
	Native State	8,917,894	117·55	152	P. 139,535 R. 17,556	130,659 11,725	270,194 29,281	1,970	271,181	162,432	85,179	253,942	29,298	18,633	93·99	63·64	30·57	233,919	26·05	...	...
	In British Territory ...	16,503,663	132·95	300	P. 257,682 R. 18,738	240,654 11,738	498,336 30,476	1,763	500,128	319,137	151,563	479,812	30,522	20,276	96·28	66·53	30·30	45,934	27·83	4,752	0·29
	In Native State Territory.	9,111,865	112·46	153	P. 142,489 R. 17,731	133,486 11,792	275,975 29,523	1,997	276,972	166,015	86,988	259,581	29,541	18,852	94·06	63·86	30·56	239,017	26·23	...	...
	GRAND TOTAL ...	25,615,528	124·86	453	P. 400,171 R. 36,469	374,140 23,530	774,311 59,999	1,842	777,100	485,152	238,551	739,393	60,063	39,128	95·49	65·21	30·39	698,368	27·26	4,752	0·19

STATEMENT No. II., showing the Cost of the Department

No.	Circles and Districts.	Establishment.																	
		Deputy Sanitary Commissioners.	Superintendents of Vaccination.	Inspectors of Sanitation and Vaccination.			Assistant Superintendents of Vaccination.			Clerks and Kárkúns.	Vaccinators.								Havaldárs and Peons.
				1st Class.	2nd Class.	3rd Class.	1st Class.	2nd Class.	3rd Class.		Government.	Municipal.	Cantonment.	Local Fund. 1st Class.	Local Fund. 2nd Class.	Local Fund. 3rd Class.	Local Fund. Candidates.	Native State.	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE WESTERN REGISTRATION DISTRICT.																		
	Administrative Charges	1	..	1	1	4	..	..	..	2	..	..	..	..	..	..	..	..	10
1	Khándesh Collectorate ..	..	..	..	..	..	..	..	..	..	..	1	..	1	7	17	..	..	25
2	Násik do.	..	..	..	..	..	..	..	..	..	..	1	1	1	5	6	..	..	13
3	Thánk do.	..	..	..	..	..	..	..	..	..	..	2	..	1	5	6	1	1	15
4	Kolába do.	..	..	..	..	..	..	..	..	..	..	1	..	1	3	4	1	1	10
	Total ..	1	..	1	1	4	..	..	..	2	..	5	1	4	20	33	2	2	73
	THE PRESIDENCY CIRCLE.																		
	Administrative Charges	..	1	..	...	..	..	..	..	..	..	..	..	..	..	..	..	..	3
5	Bombay	..	..	..	...	..	1	..	..	17	..	9	..	..	..	..	..	..	
	Total ..	..	1	..	..	..	1	..	..	17	..	9	..	..	..	..	..	..	3
	THE CENTRAL REGISTRATION DISTRICT.																		
	Administrative Charges	1	..	1	2	3	..	..	..	2	..	..	..	..	..	..	..	..	10
6	Ahmednagar Collectorate ..	..	..	..	..	..	..	..	..	..	..	1	..	1	5	6	1	..	13
7	Poona do.	..	..	..	..	..	..	..	..	..	..	2	1	1	5	8	1	..	16
8	Sholápur do.	..	..	..	..	..	..	..	..	..	..	3	..	1	3	5	1	1	13
9	Sátára do.	..	..	..	..	..	..	..	..	..	..	1	..	1	5	8	1	5	20
10	Ratnágiri do.	..	..	..	..	..	..	..	..	..	..	..	..	1	6	6	1	2	17
	Total ..	1	..	1	2	3	..	..	..	2	..	7	1	5	24	33	5	8	89
	THE SOUTHERN REGISTRATION DISTRICT.																		
	Administrative Charges	1	..	1	..	3	..	..	..	2	..	..	..	..	..	..	..	..	9
11	Belgaum Collectorate	..	..	..	..	..	..	..	..	..	..	2	..	1	2	7	1	..	12
12	Dhárwár do.	..	..	..	..	..	..	..	..	..	..	3	..	1	5	9	1	1	19
13	Kaládgi do.	..	..	..	..	..	..	..	..	..	..	1	..	1	3	4	1	..	9
14	Kánara do.	..	..	..	..	..	..	..	..	..	..	1	..	1	3	9	1	..	13
15	Kolhápur	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	12	13
16	Southern Marátha Jághírs ..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	15	16
	Total ..	1	..	1	..	4	..	..	1	2	..	7	..	4	14	29	4	28	91
	THE EASTERN GUJARA'T REGISTRATION DISTRICT.																		
	Administrative Charges	1	..	1	1	3	..	..	..	2	..	..	..	..	..	..	..	..	9
17	Surat Collectorate	..	..	..	..	..	..	..	..	..	..	2	..	1	3	5	1	3	14
18	Broach do.	..	..	..	..	..	..	..	..	..	..	1	..	1	1	3	1	..	6
19	Kaira do.	..	..	..	..	..	..	..	..	..	..	1	..	1	3	4	1	1	11
20	Panch Mahále	..	..	..	..	..	..	..	..	..	..	..	..	1	2	3	..	..	6
21	Ahmedabad Collectorate ..	..	..	..	..	..	..	..	..	..	..	3	..	1	3	7	1	..	14
22	Mahi Kántha Agency ..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	..	..	5	2
23	Rewa Kántha do. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12	12
	Total ..	1	..	1	1	3	..	..	..	2	..	7	..	5	12	22	4	21	74
	THE WESTERN GUJARA'T CIRCLE.																		
	Administrative Charges	..	1	..	..	..	..	1	1	2	..	..	..	..	..	..	..	..	6
24	Káthiáwár	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	36	37
25	Pálanpur	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	6	7
	Total ..	..	1	..	..	..	..	1	1	2	2	..	..	..	..	..	..	42	50
	THE SIND REGISTRATION DISTRICT.																		
	Administrative Charges	1	1	1	1	4	..	..	..	2	..	..	..	..	..	..	..	..	10
26	Karáchi Collectorate	..	..	..	..	..	..	..	..	..	..	2	..	1	4	5	1	..	10
27	Hyderabad do.	..	...	..	..	..	..	..	..	..	..	1	..	2	5	6	1	..	14
28	Thar and Párkar	..	..	..	..	..	..	..	..	..	..	..	..	1	2	4	1	..	7
29	Shikárpur Collectorate	..	..	..	..	..	..	..	..	..	..	4	..	1	6	9	1	3	23
30	Upper Sind Frontier	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	1	..	4
	Total ..	1	1	1	1	4	..	..	..	2	..	7	..	6	18	26	5	3	68
	THE BARODA CIRCLE.																		
31	Baroda States	..	...	1	1	1	..	..	..	..		..	..	.		..	.	31	34
	THE CUTCH CIRCLE.																		
32	Cutch States	..	..	..	..	..	1	..	..	..	..	.	..		..	..	..	17	19
	IN THE ADEN MUNICIPALITY.																		
33	Aden	..	..	..	..	..	..	..	..	..	...	1	..	..	..	..	..	..	1
	Total for the Bombay Presidency.	5	3	6	6	19	2	1	2	29	2	43	2	24	88	143	20	152	502

DEPARTMENT,

in the Bombay Presidency during the year 1884-85.

Expenditure.				Paid from							
Pay of Establishment.	Travelling Allowances.	Contingencies.	Total Cost.	Provincial Funds.	Local Funds.	Municipal Funds.	Cantonment Funds.	Native State Funds.	Total.	Number of all successful Vaccinations and Revaccinations.	Average Cost of each successful Case.
21	22	23	24	25	26	27	28	29	30	31	32
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.
15,189 0 11	2,570 11 7	921 2 0	18,680 14 6	18,680 14 6	....	....	....	....	18,680 14 6	....	....
6,907 2 4	....	478 7 4	7,386 9 8	....	7,145 9 8	240 0 0	....	....	7,386 9 8	37,64	0 3 2
3,674 0 2	....	225 13 3	3,899 13 5	....	3,602 13 5	264 0 0	33 0 0	....	3,899 13 5	18,779	0 3 4
4,209 8 9	....	340 2 7	4,549 11 4	....	3,723 15 0	493 7 0	....	332 5 4	4,549 11 4	18,966	0 3 10
2,686 13 2	....	226 15 5	2,913 12 7	....	2,511 5 2	57 8 5	....	344 15 0	2,913 12 7	15,282	0 3 1
32,657 9 4	2,570 11 7	2,201 8 7	37,429 13 6	18,680 14 6	16,983 11 3	1,054 15 5	33 0 0	677 4 4	37,429 13 6	90,670	0 6 7
4,360 0 0	360 0 0	16 8 0	4,576 8 0	4,576 8 0	....	....	....	....	4,576 8 0	....	....
8,995 12 0	....	4,801 2 11	13,796 14 11	....	....	13,796 14 11	....	....	13,796 14 11	17,340	1 0 11
13,195 12 0	360 0 0	4,817 10 11	18,373 6 11	4,576 8 0	....	13,796 14 11	....	....	18,373 6 11	17,340	1 0 11
16,758 12 2	2,339 4 1	1,259 11 3	20,357 11 6	20,357 11 6	....	....	....	....	20,357 11 6	....	....
3,685 9 4	....	171 7 3	3,857 0 7	....	3,604 0 1	253 0 6	....	....	3,857 0 7	26,489	0 2 4
5,020 14 5	....	628 1 3	5,648 15 8	....	4,158 12 8	858 0 0	632 3 0	....	5,648 15 8	23,396	0 3 10
3,773 3 5	....	271 14 9	4,045 2 2	....	2,753 2 6	971 0 2	....	320 15 6	4,045 2 2	27,273	0 2 4
5,860 5 4	....	367 12 6	6,228 1 10	....	4,670 14 0	283 9 10	....	1,273 10 0	6,228 1 10	42,180	0 2 4
4,228 14 4	24 0 0	263 5 4	4,516 3 8	....	4,038 2 9	....	....	473 0 11	4,516 3 8	36,772	0 2 4
39,327 11 0	2,363 4 1	2,961 4 4	44,653 3 5	20,357 11 6	19,225 0 0	2,365 10 6	632 3 0	2,072 10 5	44,653 3 5	149,950	0 4 9
15,855 7 4	2,587 10 6	2,097 10 6	20,541 12 4	20,541 12 4	....	....	....	....	20,541 12 4	....	....
4,170 1 3	....	373 7 11	4,543 9 2	....	4,232 11 11	310 13 3	....	....	4,543 9 2	22,802	0 3 2
5,624 0 5	....	680 10 9	6,304 11 2	....	5,307 10 10	744 4 6	....	252 11 10	6,304 11 2	31,100	0 3 3
3,253 4 0	....	305 5 9	3,558 9 9	....	3,450 9 9	108 0 0	....	....	3,558 9 9	22,367	0 2 7
3,522 8 0	....	211 5 7	3,833 13 7	....	3,704 11 11	129 1 8	....	....	3,833 13 7	10,790	0 5 8
3,925 5 7	....	154 0 0	4,079 5 7	....	....	....	....	4,079 5 7	4,079 5 7	21,724	0 3 0
3,533 5 11	....	345 11 10	3,879 1 9	....	....	....	....	3,879 1 9	3,879 1 9	15,451	0 4 0
39,885 0 6	2,587 10 6	4,168 4 4	46,740 15 4	20,541 12 4	16,695 12 5	1,292 3 5	....	8,211 3 2	46,740 15 4	1,24,243	0 6 0
15,408 13 11	2,158 2 1	1,098 1 6	18,665 1 6	18,665 1 6	....	....	....	....	18,665 1 6	....	....
3,669 1 6	....	270 9 10	3,939 11 4	....	2,705 2 1	644 2 9	....	590 6 6	3,939 11 4	20,130	0 3 2
1,692 1 11	....	185 11 1	1,877 13 0	....	1,610 10 6	267 2 6	....	....	1,877 13 0	10,545	0 2 10
2,873 5 9	....	214 12 7	3,088 2 4	....	2,534 6 7	331 6 0	....	222 5 9	3,088 2 4	23,792	0 2 1
1,584 11 11	....	133 8 5	1,718 4 4	....	1,718 4 4	....	....	....	1,718 4 4	9,250	0 3 0
3,834 14 11	....	339 10 2	4,174 9 1	....	3,335 2 0	839 7 1	....	....	4,174 9 1	21,621	0 2 5
1,269 0 0	....	88 2 0	1,347 2 0	....	....	....	....	1,347 2 0	1,347 2 0	8,958	0 2 5
3,029 13 0	....	193 2 0	3,222 15 0	....	....	....	....	3,222 15 0	3,222 15 0	18,102	0 2 10
33,351 14 11	2,158 2 1	2,523 9 7	38,033 10 7	18,665 1 6	11,853 9 6	2,132 2 4	....	5,382 13 3	38,033 10 7	1,18,496	0 5 2
9,932 3 0	2,074 11 2	864 10 9	12,871 8 11	12,271 8 11	....	....	....	600 0 0	12,871 8 11	....	....
11,351 14 1	2,088 12 0	1,789 9 7	15,230 3 8	252 0 0	....	....	....	14,978 3 8	15,230 3 8	86,787	0 2 10
2,018 13 0	....	27 10 0	2,046 7 0	110 8 6	....	....	110 8 6	1,825 6 0	2,046 7 0	18,332	0 1 9
23,302 14 1	4,163 7 2	2,681 14 4	30,148 3 7	12,634 1 5	....	....	110 8 6	17,403 9 8	30,148 3 7	1,05,119	0 4 7
18,161 15 6	3,455 6 10	1,310 8 10	22,927 15 2	21,538 1 4	....	1,389 13 10	....	....	22,927 15 2	....	....
3,138 4 6	773 5 7	234 9 10	4,146 3 11	....	3,496 3 4	650 0 7	....	....	4,146 3 11	17,327	0 3 10
3,839 9 10	763 7 1	328 14 1	4,931 15 0	....	4,595 15 0	336 0 0	....	....	4,931 15 0	20,334	0 3 10
1,738 13 0	440 1 1	177 12 2	2,356 6 3	....	2,356 6 3	....	....	....	2,356 6 3	10,922	0 3 5
6,684 4 2	1,003 3 8	519 6 2	8,206 14 0	....	5,710 5 6	1,179 8 6	....	1,317 0 0	8,206 14 0	34,335	0 3 10
1,166 5 8	283 2 6	107 1 11	1,556 10 1	....	1,556 10 1	....	....	....	1,556 10 1	6,738	0 3 8
34,729 3 8	6,718 10 9	2,678 5 0	44,126 3 5	21,538 1 4	17,715 11 2	3,555 6 11	....	1,317 0 0	44,126 3 5	89,816	0 7 10
11,606 11 5	145 12 11	302 15 1	12,055 7 5	....	....	....	....	12,055 7 5	12,055 7 5	61,830	0 3 1
4,098 10 10	3,626 9 0	3 9 0	7,728 12 10	....	....	....	....	7,728 12 10	7,728 12 10	20,485	0 6 0
414 1 9	....	....	414 1 9	....	....	414 1 9	....	....	414 1 9	328	1 4 2
2,32,669 9 6	24,894 4 1	23,340 1 2	2,79,703 14 9	1,16,994 2 7	82,473 12 4	24,611 7 3	775 11 6	54,848 13 1	2,79,703 14 9	778,277	0 5 9

DEPARTMENT.

in the Bombay Presidency during the year 1884-85.

Expenditure.				Paid from								
Pay of Establishment.	Travelling Allowances.	Contingencies.	Total Cost.	Provincial Funds.	Local Funds.	Municipal Funds.	Cantonment Funds.	Native State Funds.	Total.	Number of all successful Vaccinations and Revaccinations.	Average Cost of each successful Case.
21	22	23	24	25	26	27	28	29	30	31	32
R. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.
189 0 11	2,670 11 7	921 2 0	18,680 14 6	18,680 14 6	....	....	....	....	18,680 14 6	....	....
907 2 4	....	478 7 4	7,385 9 8	....	7,145 9 8	240 0 0	....	....	7,385 9 8	37,64	0 3 2
674 0 2	....	245 13 3	3,899 13 5	....	3,662 13 5	264 0 0	33 0 0	....	3,899 13 5	18,779	0 3 4
209 8 9	....	349 2 7	4,649 11 4	....	3,722 15 0	493 7 0	....	332 5 4	4,649 11 4	18,966	0 3 10
856 13 2	....	226 15 5	2,913 12 7	....	2,511 5 2	57 8 5	....	344 15 0	2,913 12 7	15,282	0 3 1
657 9 4	2,570 11 7	2,201 8 7	37,429 13 6	18,680 14 6	16,983 11 3	1,054 15 5	33 0 0	677 4 4	37,429 13 0	90,670	0 6 7
200 0 0	360 0 0	16 8 0	4,576 8 0	4,576 8 0	....	....	....	....	4,576 8 0	....	....
995 12 0	....	4,801 2 11	13,796 14 11	....	....	13,796 14 11	....	....	13,796 14 11	17,310	1 0 11
195 12 0	360 0 0	4,817 10 11	18,373 6 11	4,576 8 0	....	13,796 14 11	....	....	18,373 6 11	17,340	1 0 11
6,758 12 2	2,339 4 1	1,259 11 3	20,357 11 6	20,357 11 6	....	....	....	....	20,357 11 6	....	....
3,685 9 4	....	171 7 3	3,857 0 7	....	3,604 0 1	253 0 6	....	....	3,857 0 7	26,439	0 2 4
5,020 14 5	....	628 1 3	5,648 15 8	....	4,158 12 8	858 0 0	632 3 0	....	5,648 15 8	23,336	0 3 10
3,773 3 5	....	271 14 9	4,045 2 2	....	2,753 2 6	971 0 2	....	320 15 6	4,045 2 2	27,273	0 2 4
860 5 4	....	367 12 6	6,228 1 10	....	4,676 14 0	283 9 10	....	1,273 10 0	6,228 1 10	42,130	0 2 4
328 14 4	24 0 0	263 5 4	4,516 3 8	....	4,038 2 9	....	....	478 0 11	4,516 3 8	36,772	0 2 4
27 11 0	2,363 4 1	2,364 4 4	44,653 3 5	20,357 11 6	19,225 0 0	2,365 10 6	632 3 0	2,072 10 5	44,653 3 5	149,950	0 4 9
15,856 7 4	2,587 10 6	2,097 10 6	20,541 12 4	20,541 12 4	....	....	....	....	20,541 12 4	....	....
4,170 1 3	....	373 7 11	4,543 9 2	....	4,232 11 11	310 13 3	....	....	4,543 9 2	22,802	0 3 2
5,624 0 5	....	680 10 9	6,304 11 2	....	5,307 10 10	744 4 6	....	252 11 10	6,304 11 2	31,100	0 3 3
3,253 4 0	....	305 5 9	3,558 9 9	....	3,450 9 9	108 0 0	....	....	3,558 9 9	22,367	0 2 7
3,522 8 0	....	211 5 7	3,833 13 7	....	3,704 11 11	129 1 8	....	....	3,833 13 7	10,790	0 5 8
3,925 5 7	....	154 0 0	4,079 5 7	....	....	....	....	4,079 5 7	4,079 5 7	21,724	0 3 0
3,343 5 11	....	346 11 10	3,879 1 9	....	....	....	....	3,879 1 9	3,879 1 9	15,461	0 4 0
39,935 0 6	2,587 10 6	4,168 4 4	46,740 15 4	20,541 12 4	16,695 12 5	1,292 3 5	....	8,211 3 2	46,740 15 4	1,24,243	0 6 0
15,408 13 11	2,158 2 1	1,098 1 6	18,665 1 6	18,665 1 6	....	....	....	....	18,665 1 6	....	....
3,669 1 6	....	270 9 10	3,939 11 4	....	2,705 2 1	644 2 9	....	590 6 6	3,939 11 4	20,130	0 3 2
1,692 1 11	....	185 11 1	1,877 13 0	....	1,610 10 6	267 2 6	....	....	1,877 13 0	10,645	0 2 10
2,473 5 9	....	214 12 7	3,088 2 4	....	2,634 6 7	331 6 0	....	222 5 9	3,088 2 4	23,792	0 2 1
1,544 11 11	....	183 8 5	1,718 4 4	....	1,718 4 4	....	....	....	1,718 4 4	9,750	0 3 0
3,834 14 11	....	339 10 2	4,174 9 1	....	3,285 2 0	889 7 1	....	....	4,174 9 1	27,841	0 2 5
1,259 0 0	....	88 2 0	1,347 2 0	....	....	....	....	1,347 2 0	1,347 2 0	8,956	0 2 5
3,029 13 0	....	193 2 0	3,222 15 0	....	....	....	....	3,222 15 0	3,222 15 0	18,102	0 2 10
33,351 14 11	2,158 2 1	2,523 9 7	38,033 10 7	18,665 1 6	11,853 9 6	2,132 2 4	....	5,382 13 3	38,033 10 7	1,18,496	0 5 2
9,932 3 0	2,074 11 2	864 10 9	12,871 8 11	12,271 8 11	....	....	....	600 0 0	12,871 8 11	....	....
11,351 14 1	2,088 12 0	1,789 9 7	15,230 3 8	252 0 0	....	....	....	14,978 3 8	15,230 3 8	86,787	0 2 10
2,018 13 0	....	27 10 0	2,046 7 0	110 8 6	....	....	110 8 6	1,825 6 0	2,046 7 0	18,332	0 1 9
23,302 14 1	4,163 7 2	2,681 14 4	30,148 3 7	12,634 1 5	....	....	110 8 6	17,403 9 8	30,148 3 7	1,05,119	0 4 7
18,161 15 6	3,455 6 10	1,310 8 10	22,927 15 2	21,538 1 4	....	1,389 13 10	....	....	22,927 15 2	....	....
3,138 4 6	773 5 7	234 9 10	4,146 3 11	....	3,496 3 4	650 0 7	....	....	4,146 3 11	17,397	0 3 10
3,439 9 10	763 7 1	328 14 1	4,931 15 0	....	4,595 15 0	336 0 0	....	....	4,931 15 0	20,384	0 3 10
1,738 12 0	440 1 1	177 12 2	2,356 9 3	....	2,356 9 3	....	....	....	2,356 9 3	10,922	0 3 5
6,684 4 2	1,003 3 8	519 6 2	8,206 14 0	....	5,710 5 8	1,179 8 6	....	1,317 0 0	8,206 14 0	34,385	0 3 10
1,166 5 8	283 2 6	107 1 11	1,556 10 1	....	1,556 10 1	....	....	..	1,556 10 1	6,738	0 3 8
34,729 3 8	6,718 10 9	2,678 5 0	44,126 3 5	21,538 1 4	17,715 11 2	3,555 6 11	....	1,317 0 0	44,126 3 5	89,816	0 7 10
11,606 11 5	145 12 11	302 15 1	12,055 7 5	....	....	....	....	12,055 7 5	12,055 7 5	61,820	0 3 1
4,098 10 10	3,626 9 0	3 9 0	7,728 12 10	....	....	....	....	7,728 12 10	7,728 12 10	20,485	0 6 0
414 1 9	....	....	414 1 9	....	....	414 1 9	....	....	414 1 9	328	1 4 2
2,32,669 9 6	24,694 4 1	23,340 1 2	2,79,703 14 9	1,16,994 2 7	82,473 12 4	24,611 7 3	775 11 6	54,848 13 1	2,79,703 14 9	778,277	0 5 9

Statement No. III, showing Dispensary Vaccination, &c.—*continued.*

Districts.		Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination.				Re-vaccination.		Percentages of Successful Cases.	
								Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.
									Under 1 year.	1 and under 6.	Total of all Ages.				
1		2	3	4			5	6	7	8	9	10	11	12	13
	THE CENTRAL REGISTRATION DISTRICT.			Males.	Females.	Total.									
Ahmednagar Collectorate.	Shevgaon	...	...	69	64	133	133	133	74	42	117	...	...	87·97	...
	Nevása	...	...	52	54	106	106	106	86	12	98	...	...	92·45	...
	Total ...	...	...	121	118	239	119	239	160	54	215	...	...	89·96	...
Poona Collectorate.	Álandi	...	...	37	35	72	72	72	57	13	71	...	...	98·61	...
	Junnar	...	...	115	84	199	199	199	72	101	173	...	...	86·93	...
	Indápur	...	...	73	63	136	136	136	57	57	116	...	...	85·29	...
	Talegaon Dhamdhera	...	...	37	30	67	67	67	48	14	62	...	...	92·54	...
	Sásvad	...	...	102	84	186	186	186	102	78	183	...	...	98·39	...
	Jejuri	...	...	P. 60 R. 1	64 1	124 2	126	124	71	43	118	2	2	95·16	100·
	Bárámati	...	...	P. 105 R. 1	102 1	207 2	209	209	137	47	184	2	1	88·89	50·00
	Talegaon Dábháda...	...	...	P. 67 R. ...	60 2	127 2	129	127	51	35	86	2	2	67·72	100·
	Total ...	...	...	P. 596 R. 2	522 4	1,118 6	140	1,120	595	388	993	6	5	88·82	83·33
Sholápur Collectorate.	Karmála	...	...	P. 145 R. 4	116 1	261 5	266	261	190	60	250	5	4	95·79	80·00
Sátára Collectorate.	Wái	...	...	109	99	208	208	208	76	117	196	...	...	94·23	...
	Pátan	...	...	P. 46 R. 6	53 2	99 7	106	99	59	15	83	7	5	83·84	71·43
	Karád	...	...	204	197	401	401	401	298	65	363	...	...	90·52	...
	Islámpur	...	...	116	110	226	226	226	161	63	224	...	..	99·11	...
	Mhasvad	...	...	P. 69 R. 1	64 1	133 2	135	135	85	43	128	2	...	96·24	...
	Pusesávli	...	...	P. 57 R. 7	68 ...	125 7	132	125	115	10	125	7	7	100·	100·
	Tásgaon	...	...	P. 114 R. 1	93 ...	207 1	208	207	132	22	154	1	...	74·40	...
	Total ...	...	...	P. 715 R. 14	684 3	1,399 17	202	1,401	926	335	1,273	17	12	90·99	70·59
Ratnágiri Collectorate.	Dápoli	...	...	28	36	64	64	64	61	3	64	...	...	100·	...
	Vengurla	...	...	31	39	70	70	70	34	28	62	...	...	88·57	...
	Total ...	...	...	59	75	134	67	134	95	31	126	...	..	94·03	...
Native States.	Akalkot	...	...	158	160	318	318	318	235	74	309	...	...	97·17	...
	Sávantvádi	...	...	P. 87 R. 12	85 2	172 14	186	172	148	16	167	14	9	97·09	64·29
	Native States Total ..	...	...	P. 245 R. 12	245 2	490 14	252	490	383	90	476	14	9	97·14	64·29
	Total for the Central Registration Distict	...	...	P. 1,881 R. 32	1,760 10	3,641 42	167	3,645	2,349	958	3,333	42	30	91·54	71·43

Statement No. III, showing Dispensary Vaccination, &c.—*continued*.

Districts.		Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the season.	Total Number of Persons Vaccinated. Males.	Females.	Total.	Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination. Total.	Successful. Under 1 year.	1 and under 6.	Total of all Ages.	Re-vaccination. Total.	Successful.	Percentages of Successful Cases. Primary.	Re-vaccination.
1		2	3	4			5	6	7	8	9	10	11	12	13
	THE SOUTHERN REGISTRATION DISTRICT.														
Belgaum Collectorate.	Belgaum Jail ...	...	...	P. 124 R. 44	22 2	146 46	192	146	...	..	...	46	...	...	...
	Chikodi	...	...	115	112	227	227	228	159	60	221	..	...	97·35	..
	Saundatti	...	...	P. 111 R. 6	121 ...	232 6	238	232	146	80	227	6	6	97·84	100·
	Gokák	...	...	P. 192 R. 7	173 ...	365 7	372	365	275	79	356	7	5	97·53	71·43
	Athni...	...	...	P. 160 R. 2	168 2	328 4	332	329	245	77	326	4	1	99·39	25·00
	Total ...	...	...	P. 702 R. 59	596 4	1,298 63	272	1,300	825	296	1,130	63	12	87·06	19·05
Dhárwár Collectorate.	Háveri	...	...	P. 57 R. 3	47 1	104 4	108	105	27	58	86	4	4	82·69	100·
Kaládgi Collectorate.	Indi	...	...	116	92	208	208	208	159	40	204	...	...	98·08	...
	Kaládgi Jail... ...	...	...	P. ..... R. 23	3 ...	3 23	26	3	...	...	...	23	16	...	69·57
	Shindgi	...	...	88	61	149	149	149	98	29	127	...	..	85·23	...
	Bágevádi	...	...	P. 89 R. 3	106 ...	195 3	198	196	145	34	183	3	3	93·84	100·
	Ilkal	...	...	P. 211 R. 3	164 3	375 6	381	377	266	92	359	6	6	95·73	100·
	Bijápur	...	...	P. 57 R. 2	40 ..	97 2	99	98	22	67	89	2	1	91·75	50·00
	Muddebihál ...	...	...	P. 43 R. 4	39 ...	82 4	86	82	42	17	59	4	...	71·95	...
	Total ...	...	...	P. 604 R. 35	505 3	1,109 38	164	1,113	732	279	1,021	38	26	92·06	68·42
Kánara Collectorate.	Honávar	...	...	P. 126 R. 1	76 1	202 2	204	202	53	113	202	2	2	100·	100·
	Sirsi	...	...	71	71	142	142	151	62	67	132	...	...	[illegible]	[illegible]
	Siddápur	...	...	P. 31 R. 2	27 2	58 4	62	59	26	18	48	4	4	[illegible]	[illegible]
	Yellápur	...	...	P. 14 R. 1	7 ...	21 1	22	21	2	4	10	1	[illegible]	[illegible]	[illegible]
	Haliyál	...	...	P. 94 R. 2	86 ...	180 2	182	180	102	60	164	2	[illegible]	[illegible]	[illegible]
	Supa	...	...	P. 48 R. 17	42 22	90 39	129	91	27	37	78	39	[illegible]	[illegible]	[illegible]
	Mundgod	...	...	P. 24 R. 6	39 2	63 8	71	63	27	34	62	8	6	98·41	75·00
	Total ...	...	...	P. 408 R. 29	348 27	756 56	116	767	299	333	696	56	36	92·06	64·29
Kolhápur State.	Gárgoti	...	...	19	11	30	30	30	28	1	29	...	...	96·67	...
	Ajra	...	...	P. 68 R. 2	61 2	129 4	133	129	87	31	123	4	2	95·35	50·00
	Malkápur ...	...	...	41	35	76	76	77	50	17	70	..	...	92·11	...
	Kolhápur	...	...	P. 43 R. 205	30 59	73 264	337	73	61	9	73	264	234	100·	88·64
	Gad Hinglaj... ...	...	...	P. 65 R. 21	66 5	131 26	157	131	78	46	124	26	21	94·66	80·77
	Total ...	...	...	P. 236 R. 228	203 66	439 294	147	440	304	104	419	294	257	95·44	87·41
Southern Marátha Jághirs.	Sángli	...	...	P. 104 R. 7	102 1	206 8	214	207	108	48	161	8	4	78·16	50·00
	Sháhapur	...	...	P. 90 R. 5	74 2	164 7	171	164	72	27	99	7	2	60·36	28·5
	Mangalvedha ...	...	...	P. 207 R. 27	241 ...	448 27	475	448	216	137	363	27	11	81·03	40·74
	Terdál	...	...	P. 140 R. 3	134 2	274 5	270	275	51	111	165	5	2	60·22	40·00
	Shirhatti	...	...	34	36	70	70	70	37	27	67	...	...	95·71	...
	Koochi	...	...	66	57	123	123	123	76	16	93	...	...	75·61	...
	Miraj	...	...	P. 389 R. 33	324 7	713 40	753	720	469	125	599	40	5	84·01	12·50
	Budgaon	...	...	P. 44 R. 11	44 ...	88 11	99	90	61	16	77	11	8	87·50	72·73
	Mudhol	...	...	33	38	71	71	71	46	21	67	...	...	94·37	...
	Rámdurg	...	...	P. 118 R. 5	102 2	220 7	227	220	126	64	200	7	4	90·91	57·14
	Total ...	...	...	P. 1,225 R. 91	1,152 14	2,377 105	248	2,388	1,262	592	1,891	105	36	79·55	34·29

Statement No. III, showing Dispensary Vaccination, &c.—*continued.*

Districts.		Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the Season.	Total Number of Persons vaccinated.				Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinated.				Re-vaccination.		Percentages of Successful Cases.	
										Successful.						
									Total.	Under 1 year.	1 and under 6.	Total of all Ages.	Total.	Successful.	Primary.	Re-vaccination.
1		2	3	4				5	6	7	8	9	10	11	12	13
	THE SOUTHERN REGISTRATION DISTRICT—*contd.*			Males.	Females.	Total.										
	Native States, Total.	...	...	P. 1,461 R. 319	1,355 80	2,816 399		214	2,828	1,566	696	2,310	399	293	82·03	73·43
	TOTAL FOR THE SOUTHERN REGISTRATION DISTRICT.	...	...	P. 3,232 R. 445	2,851 115	6,083 560		190	6,113	3,449	1,662	5,243	560	371	86·19	66·25
	THE EASTERN GUJARÁT REGISTRATION DISTRICT.															
Surat Collectorate.	Ránder	...	...	108	78	186		186	186	135	45	180	...	...	96·77	...
	Bárdoli	...	...	61	69	130		130	130	90	31	122	...	...	93·85	...
	Bulsár	...	...	P. 170 R. 5	169 5	339 10		349	339	160	164	324	10	10	95·58	100·
	Kálliawari	...	...	70	74	144		144	144	73	61	136	...	...	94·44	...
	Total ...	...	...	P. 409 R. 5	390 5	799 10		202	799	458	301	762	10	10	95·36	100·
Broach Collectorate.	Iláv	...	...	35	43	78		78	78	67	9	76	...	...	97·43	...
Kaira Collectorate.	Kapadvanj	...	...	P. 281 R. 3	225 ...	506 3		509	506	382	75	458	3	1	90·51	33·33
	Borsad	...	...	P. 330 R. 5	236 2	566 7		573	568	299	251	550	7	5	97·17	71·43
	Mehmadabad ...	...	...	P. 144 R. 40	130 ...	274 40		314	274	204	45	249	40	19	90·88	47·50
	Kaira Jail	...	...	94	...	94		94	94	...	...	52	...	...	55·32	...
	Total ...	...	...	P. 849 R. 48	591 2	1,440 50		372	1,442	885	371	1,309	50	25	90·90	50·00
Ahmedabad Collectorate.	Dholera	...	...	132	149	281		281	281	147	124	277	...	...	98·58	...
	Khárághoda	...	...	P. 28 R. 1	31 ...	59 1		60	70	19	6	25	1	...	42·37	...
	Total ...	...	...	P. 160 R. 1	180 ...	340 1		170	351	166	130	302	1	...	88·82	...
Mahi Kántha Agency.	Sádra	...	...	P. 101 R. 26	83 ...	184 26		210	184	149	23	172	26·	10	93·48	38·46
	TOTAL FOR THE EASTERN GUJARÁT REGISTRATION DISTRICT	...	...	P. 1,554 R. 80	1,287 7	2,841 87		244	2,854	1,725	834	2,621	87	45	92·25	51·72

Statement No. III, showing Dispensary Vaccination, &c.—*continued.*

	Districts.	Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination.				Re-vaccination.		Percentages of successful cases.	
									Successful.						
								Total.	Under 1 year.	1 and under 6.	Total of all Ages.	Total.	Successful.	Primary.	Re-vaccination.
1		2	3	4			5	6	7	8	9	10	11	12	13
	THE WESTERN GUJARÁT CIRCLE.			Males.	Females.	Total.									
Káthiáwár.	Wadhwán	...	...	83	63	146	146	147	84	22	106	...	...	72·60	...
	Mánekváda	...	...	9	5	14	14	14	11	1	12	...	...	85·71	...
	Rájkot	...	...	P. 1 R. 32	... 1	1 33	34	1	...	...	1	33	14	100·	42·42
	Total ...	...	...	P. 93 R. 32	68 1	161 33	65	162	95	23	119	33	14	73·91	42·42
Native States.	Gondal	...	...	P. 68 R. 8	69 5	137 13	150	137	124	12	136	13	11	99·27	84·62
	Upleta	...	...	P. 290 R. 172	239 63	529 235	764	529	399	105	504	235	163	95·27	69·36
	Dhoráji	...	..	P. 365 R. 130	337 28	702 158	860	702	535	121	657	158	106	93·59	67·09
	Bháyávadar	..	...	106	85	191	191	191	166	22	188	...	...	98·43	...
	Limbdi	...	...	P. 105 R. 7	81 5	186 12	198	186	127	7	135	12	6	72·58	50·00
	Sársai...	...	...	P. 42 R. 22	35 24	77 46	123	77	66	8	75	46	37	97·40	80·43
	Jhinjúváda	...	...	P. 25 R. 1	18 ...	43 1	44	43	13	9	22	1	1	51·16	100·
	Dasáda	...	...	1	5	6	6	6	1	...	1	...	...	16·67	...
	Bántva	...	...	94	77	171	171	171	112	35	149	...	...	87·13	...
	Babra	...	...	36	43	79	79	79	32	42	74	...	...	93·67	...
	Lákhápádar	...	...	34	31	65	65	65	54	10	65	...	...	100·	...
	Bagusra	...	...	56	54	110	110	110	80	17	97	...	...	88·18	...
	Total ...	...	...	P. 1,222 R. 340	1,074 125	2,296 465	230	2,296	1,709	388	2,103	465	324	91·59	69·68
	TOTAL FOR THE WESTERN GUJARÁT CIRCLE	...	...	P. 1,315 R. 372	1,142 126	2,457 498	197	2,458	1,804	411	2,222	498	338	90·44	67·87
	THE SIND REGISTRATION DISTRICT.														
Karáchi Collectorate.	Tháno Bula Khán ...	...	...	3	7	10	10	10	...	...	...	...	...	...	...
	Keti Bandar	...	...	P. 23 R. 3	30 ...	53 3	56	53	44	6	50	3	3	94·34	100·
	Mirpur Batoro ...	...	...	P. 42 R. 2	34 ..	76 2	78	76	41	21	62	2	1	81·58	50·00
	Tatta	...	...	P. 129 R. 3	83 ...	212 3	215	212	94	37	131	3	1	61·79	33·33
	Jerruck	...	...	P. 28 R. 2	28 1	56 3	59	56	44	6	51	3	2	91·07	66·67
	Sehwán	...	...	P. 50 R. 9	9 ...	59 9	68	59	22	15	53	9	8	89·83	88·89
	Total ...	...	...	P. 275 R. 19	191 1	466 20	81	466	245	85	347	20	15	74·46	75·00
Hyderabad Collectorate.	Tháru Sháh	...	...	52	42	94	94	94	44	29	73	...	...	77·66	...
	Hála	...	...	60	55	115	115	122	98	1	99	...	...	86·09	...
	Alahyar-jo-Tándo ...	...	...	44	45	89	89	90	73	5	78	...	...	87·64	...
	Tando...	...	...	P. 90 R. 10	64 2	154 12	166	154	72	30	105	12	3	68·18	25·00
	Tando Bago	...	...	P. 34 R. 2	29 1	63 3	66	63	33	26	59	3	3	93·65	100·
	Tando Adam ...	...	...	P. 11 R. 5	6 ...	17 5	22	17	1	2	4	5	3	23·53	60·00
	Mirpur Khás ...	...	...	P. 9 R. 3	8 ...	17 3	20	17	13	1	15	3	2	88·24	66·67
	Total ...	...	...	P. 300 R. 20	249 3	549 23	82	557	334	94	433	23	11	78·87	47·83
Thar and Párkar.	Nagar Párkar ...	...	...	34	40	74	74	74	52	20	72	...	...	97·30	...
	Mitti	...	...	37	26	63	63	63	42	17	59	...	...	93·65	...
	Umarkot	...	...	36	24	60	60	68	27	9	38	...	...	63·33	...
	Khipra	...	...	P. 5 R. 4	5 1	10 5	15	12	9	...	9	5	5	90·00	100·
	Total ...	...	...	P. 112 R. 4	95 1	207 5	53	217	130	46	178	5	5	85·99	100·

Statement No. III, showing Dispensary Vaccination, &c.—*continued.*

Districts.		Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination.				Re-vaccination.		Percentages of successful cases.	
								Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.
									Under 1 year.	1 and under 6.	Total of all Ages.				
1		2	3	4			5	6	7	8	9	10	11	12	13
	THE SIND REGISTRATION DISTRICT—*continued.*			Males.	Females.	Total.									
Shikárpur Collectorate.	Rohri	...	...	P. 152 R. 236	122 ...	274 236	510	274	260	12	272	236	231	99·27	97·88
	Mehar	...	...	31	20	51	51	51	42	4	46	...	...	90·20	...
	Kambar	...	...	19	11	30	30	30	25	...	25	...	...	83·33	...
	Total ...	...	...	P. 202 R. 236	153 ...	355 236	197	355	327	16	343	236	231	96·62	97·88
	TOTAL FOR THE SIND REGISTRATION DISTRICT	...	...	P. 889 R. 279	688 5	1,577 284	93	1,595	1,036	241	1,301	284	262	82·50	92·25
	THE BARODA CIRCLE.														
Native States.	Sankheda	...	...	25	9	34	34	34	29	5	34	...	...	100·	...
	Petlad	...	...	94	63	157	157	157	105	51	157	..	...	100·	...
	Kurjan	...	...	2	2	4	4	4	1	...	1	...	...	25·00	...
	Sávli	...	...	47	37	84	84	84	54	29	83	...	...	98·81	..
	Sojitra	...	...	106	67	173	173	175	103	47	150	...	...	86·71	...
	Dabhoi	...	...	27	23	50	50	50	43	7	50	...	...	100·	...
	Padra...	...	..	74	49	123	123	123	120	2	123	...	...	100·	...
	Pátan...	..	...	216	212	428	428	428	391	36	427	...	...	99·77	...
	Visnagar	...	...	13	16	29	29	29	26	3	29	...	...	100·	...
	Vadnagar	...	...	119	87	206	206	206	193	9	202	...	...	98·06	...
	Vijápur	...	...	64	54	118	118	118	101	17	118	...	...	100·	...
	Gandevi	...	...	81	66	147	147	147	139	8	147	...	...	100·	...
	Bet	...	...	34	23	57	57	57	15	25	43	...	...	75·44	...
	Amreli	...	...	165	121	286	286	286	222	36	263	...	...	91·96	...
	Dámnagar	...	...	10	14	24	24	24	10	14	24	...	...	100·	...
	Dhari (Battallion Hospital)	..	..	3	4	7	7	7	3	4	7	...	...	100·	...
	Vyara	...	...	2	2	4	4	4	4	...	4	...	...	100·	...
	Mohwa	...	...	9	15	24	24	24	18	6	24	...	...	100·	...
	Kadi	...	...	109	105	214	214	214	177	3	181	...	...	84·58	...
	Sidhpur	...	...	26	17	43	43	43	35	4	40	...	...	93·02	...
	Dwárka	...	...	20	17	37	37	37	18	18	36	...	...	97·30	...
	Kálol	...	..	7	8	15	15	15	15	...	15	...	...	100·	...
	TOTAL FOR THE BARODA CIRCLE...	...	...	1,253	1,011	2,264	103	2,266	1,822	324	2,158	...	...	95·32	...
ADEN—SHAIK OTHMAN...		...	...	P. 123 R. 1	98 ...	221 1	222	221	36	63	121	1	...	54·75	...
BUSHIRE		...	...	4	2	6	6	6	2	...	2	...	...	33·33	...
MUSCAT		...	.	P. 30 R. 1	33 2	63 3	66	63	8	18	47	3	...	74·60	...
TOTAL FOR THE	BRITISH TERRITORY	...	..	P. 8,374 R. 713	7,429 130	15,803 843	159	15,865	9,852	4,136	14,288	843	509	90·41	60·38
	NATIVE STATES.	...	...	P. 4,375 R. 729	3,836 208	8,211 937	166	8,226	5,724	1,544	7,338	937	650	89·37	69·37
GRAND TOTAL FOR THE BOMBAY PRESIDENCY...		...	...	P. 12,749 R. 1,442	11,265 338	24,014 1,780	161	24,091	15,576	5,680	21,626	1,780	1,159	90·06	65·11

Comparative Statement No. IV., showing the Number of Persons Primarily Vaccinated and the Number of those Persons who were Successfully Vaccinated in each of the undermentioned official year.

Establishment.	Persons primarily vaccinated.																			
	Years ending 31st March.																			
	1876.		1877.		1878.		1879.		1880.		1881.		1882.		1883.		1884.		1885.	
	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.
Government	4,706	4,552	5,518	5,346	5,472	5,311	4,630	4,444	3,374	3,220	4,130	3,980	5,563	5,497	5,266	5,225	6,400	6,165	4,397	4,249
Municipal	59,392	55,698	61,671	58,300	50,250	46,355	42,211	39,129	48,318	45,069	49,857	47,361	54,726	52,225	65,208	61,802	59,559	56,670	56,895	54,582
Local Fund	375,202	364,503	394,775	382,211	340,998	326,670	304,420	292,640	322,871	312,124	347,194	337,392	379,008	369,913	419,822	407,635	441,180	426,408	441,340	425,148
Cantonment	1,018	965	827	771	845	804	872	846	839	939	967	967	1,060	1,060	1,471	1,450	1,465	1,449	1,485	1,472
Native State	224,730	211,316	242,391	226,402	246,773	228,333	188,447	174,757	188,196	175,979	213,411	202,210	257,752	246,565	266,280	254,072	284,180	269,598	270,194	253,942
Dispensary...	19,954	18,156	19,996	18,486	20,201	17,904	17,887	16,233	19,119	17,406	22,732	21,009	26,813	25,050	28,770	26,733	29,986	27,439	24,014	21,626
Army ... European	825	825	1,973	1,973	1,313	1,313	494	453	635	604	659	610	571	434	402	390	497	466	328	305
Army ... Native	4,812	4,541	5,033	4,659	4,203	3,920	3,008	2,719	3,049	2,499	3,555	2,984	3,830	3,479	4,987	4,438	3,698	3,128	3,554	3,121
Total ...	690,639	660,556	732,184	698,148	670,055	630,590	561,969	531,221	586,501	557,840	642,505	616,513	729,323	703,923	792,206	761,745	826,965	791,323	802,207	764,445

Note.—Re-vaccinations are wholly excluded from this Statement.

Annual Report of the Sanitary Commissioner for 1884.

No. 3202.

GENERAL DEPARTMENT.

Bombay Castle, 24th August 1885.

Letter from the Sanitary Commissioner for the Government of Bombay, No. 1929-B., dated 29th June 1885—Submitting the Annual Report of the Sanitary Department for the year 1884.

RESOLUTION.—*Vital Statistics*—The total number of births registered in the Bombay Presidency in 1884 was 534,723 as compared with 501,801 in 1883, the average number recorded in the ten years ending 1883 being 368,558. The proportion of births registered to the population (32·50 per mille) was higher by 2 than in the previous year and by 9·89 than the average proportion in the previous ten years. The largest number of births recorded in any one district (45,484) was, as in the previous year, in Sátára, but the highest deduced birth-rate was in Dhárwár. In Kolába, Dhárwár, Kánara, Surat, Thar and Párkar and in the City of Bombay the deduced birth-rate was lower than in the previous year. It appears that the registration of births in the capital of the Presidency, instead of improving, is becoming more defective. The deduced birth-rate in the year under review was 18·59 per mille while in the previous year it was 19·31 per mille; it was 26·38 per mille in 1883, and the average rate of the ten years ending 1883 was 21·19 per mille. As the population enumerated at the census included many males who come temporarily to Bombay for labour, the birth-rate of the city is probably below the average, but if the general birth-rate is, as believed by the Sanitary Commissioner, not less than 45 per mille, it is clear that the highest of the figures above given are very far from representing the actual birth-rate. This subject has been noticed in paragraph 21 of Government Resolution No 1167, dated 30th March 1885, reviewing the Municipal Administration Reports for 1883-84, and the Municipal Commissioner should again be requested to take early measures for improving the registration. The deduced birth-rate in Poona (15·88 per mille) was even lower than in Bombay. The birth-rates recorded in rural circles were, as in the previous year, higher than those in urban circles in all the districts except Ratnágiri, Kánara, Ahmedabad, Karáchi and Hyderabad. This result is in some measure to be expected, because domestic occurrences obtain more local notoriety in villages than in towns of considerable size, but it is to be regretted that the bye-laws rendering the registration of births obligatory which have been passed by almost all Municipalities are allowed to be generally a dead letter.

Births.

Sangamner, Junnar, Gokák, Pandharpur, Athni, Gadag-Betigeri, Ránebennur, Jambusar, Ahmedabad, Viramgám, Dholka, Karáchi.

The Sanitary Commissioner however states that the Municipal Commissioners of the towns noted in the margin deserve credit for the care they have taken to obtain an accurate registration of births. He is of opinion that in cantonments registration is still performed in a perfunctory manner.

2. The Sanitary Commissioner states that the high proportion of still-born children in Bombay (10·18 per cent.) and in Kánara (5·67 per cent.) should attract attention and investigation. He should be desired to issue the necessary instructions as regards Kánara, and the Municipal Commissioner of Bombay should be requested to cause enquiries to be made regarding the large number of children reported still-born in that city. It may be observed that the figures given in paragraph 12 of the report show the proportion of still-born children registered to the total number of births recorded, and not, as stated by Mr. Hewlett, the "percentage of still-born to born alive."

3. The total number of deaths registered in the year under review was 408,409 or 24·82 per mille as compared with 420,498 or 25·53 per mille in the previous year. The largest number of deaths (30,170) was recorded in the Dhárwár District and the lowest (1,992) in the Upper Sind Frontier District, but the figures for Broach give the highest death-rate (35·15 per mille) and those for Thar and Párkar the lowest. The death-rate in the city of Bombay (28·82) was lower by 1·26 than in the previous year. In thirteen out of the twenty-four registration districts the deduced death-rate was higher than in the previous year, the increase being most marked in the Belgaum, Dhárwár, Broach, Ahmedabad, and Upper Sind Frontier Districts. As repeatedly pointed out however in similar cases it is impossible to say how far this result was due to improvement of registration and how far to increased mortality. Of the total number of deaths recorded 23·79 per cent. were those of children under one year and 21·28 per cent. of children over one and under five years of age. The Sanitary Commissioner is no doubt correct in holding that the very high mortality amongst children indicates general defective sanitation. The ratios of deaths registered among different castes in 1883 and 1884, respectively, are as follows:—

Deaths.

	Number of Deaths.	Ratio per Mille.	
		1883.	1884.
Hindus	339,283	27·10	25·71
Mahomedans	61,389	18·51	19·76
Native Christians ...	2,572	19·45	18·59
Other Classes	5,165	51·77	64·30

Mr. Hewlett states that under the head "Other Classes" are included Pársis, Jews, Buddhists, and people of unspecified creeds, the total number as enumerated at the census of 1883, being 80,330. In reviewing the report for 1883 it was assumed that the "Other Classes" consisted mainly of wild and wandering tribes and that the large mortality amongst them was thus accounted for. But if Pársis, Jews and Buddhists constitute a large proportion of the people so classed so high a death-rate as is shown is unaccountable, for they do not live under specially insanitary conditions. It appears however that there are serious errors in the figures in the Form No. V. In several districts the number of deaths entered under the head of "Other Classes" is much larger than the total population shown under that head.

4. Mr. Hewlett is of opinion that the registration of vital statistics will never be satisfactory until it is rendered compulsory by law. But in the city of Bombay and in almost all municipal towns omission to give information of births or deaths is now punishable, and as already pointed out it is in these places that registration is most defective. In the districts the registers are constantly tested and are now in many places kept with fair accuracy. Unless the importance of accurate registration of vital statistics is recognized by those responsible for municipal administration, the law cannot be effectual.

5. *Chief Diseases.*—The number and proportion of deaths resulting from various diseases in the year under review and the previous year respectively are shown in the following statement :—

	Number of Deaths.		Ratio per Mille.	
	1883.	1884.	1883.	1884.
Cholera	37,954	13,804	2·31	0·84
Small-pox	13,404	14,438	0·81	0·88
Fevers	266,741	276,989	16·21	16·83
Bowel-complaints ...	35,292	35,983	2·14	2·19
Injuries	5,978	5,570	0·36	0·34
Other Diseases ...	60,829	61,625	3·70	3·74
Total...	420,198	408,409	25·53	24·82

Cholera.

6. Although cholera prevailed in all the registration districts in the year under review there was a considerable decrease in the number of deaths registered as resulting from it. Sind had enjoyed since 1879 an almost entire immunity from this disease, but in October last it appeared in all the districts of that province except Thar and Párkar. Although the district of Karáchi suffered more from cholera than any other district in Sind only one death was registered as due to it in the town of Karáchi, which has lately been provided with an abundant supply of pure water. In the Presidency proper the epidemic attained its maximum intensity in August, in which month 2,746 deaths were recorded as due to it. It was most prevalent in Dhárwár, Belgaum and Bijápur. The proportion of deaths to attacks in the whole Presidency was 52·93 per cent. as compared with 47·76 per cent. in 1883. The proportion was 78·13 per cent. in Bombay, which is higher than in any other Registration Circle except the district of Ahmedabad. Mr. Hewlett states that one of the principal causes of the unusual fatality of cholera in Bombay is "the long distances which the patients have to be carried to hospital," but it must not be overlooked that in the rest of the Presidency most cholera patients are not treated in hospitals or dispensaries at all, and that this theory did not meet with the support of other medical officers whose opinions on the subject were called for. The high apparent proportion of deaths to attacks in Bombay is probably in a great measure due to the circumstance that many attacks which do not terminate fatally are not reported at all.

Small-pox.

7. There was an increase of 1,034 in the number of deaths (14,438) reported as having resulted from small-pox. The largest number of deaths from this cause (2,543) was registered in the Dhárwár District, and the number was also large in Belgaum, Bijápur, Kánara, Sátára and Ratnágiri. The proportion of deaths from small-pox to population was very high in the town circles of Kumta, Vengurla, Belgaum and Kaládgi. Of the total number of deaths due to this disease 25·8 per cent. occurred among infants under one year, 37·6 per cent. among children over one and under twelve years of age, while the rest took place among adults.

Fever.

8. The number of deaths attributed to fever was 276,989 in 1884 as compared with 266,741 in 1883, the average number of deaths ascribed to it in the ten years ending 1883 being 263,385. It has previously been explained that illiterate persons in this country are inclined to assign fever as the cause of a death which is not due to some other easily recognized cause. The largest number of deaths attributed to fever (21,369) was registered in the Sátára District and the smallest (1,753) in the Upper Sind Frontier District, but the highest ratio of deaths from fever to population (28·72 per mille) was recorded in the Broach District and the lowest (8·06 per mille) in Ratnágiri. The very high death-rate (61·24 per mille) in the town of Viramgám in the year under review was mainly due to the prevalence of fever. The Collector of Ahmedabad should be requested to draw the attention of the Municipal Commissioners to the remarks in paragraph 50, Section V. of the report. It is very unsatisfactory that the sanitary condition of the town should be much worse now than it was six years ago.

Bowel-complaints.

9. The number of deaths from bowel-complaints was larger by 691 than that recorded in 1883. The highest ratio of deaths attributed to this cause to the population was returned from Belgaum and the lowest from Hyderabad. As in previous years, most of the deaths resulting from bowel-complaints occurred in the rainy season.

Injuries.

10. There was a decrease of 408 in the number of deaths (5,570) registered as resulting from injuries. The numbers of deaths resulting from different kinds of injuries in the year under review and the previous year respectively are shown in the following table:—

	1883.	1884.
Drowning	2,713	2,461
Poisoning	130	121
Hanging	179	213
Wounding	355	415
Wild Beasts	95	118
Snake-bite	1,215	1,077
Other Causes	1,291	1,165
Total	5,978	5,570

Of the 2,461 deaths by drowning 399 are reported to have been suicidal and 1,862 accidental, while it had not been ascertained when the returns were submitted under which category the rest came. The total number of suicides was the same in 1884 as in 1883, viz., 683, of which 307 were committed in the year under review by males and 376 by females. The number of persons killed by wild beasts in 1884 is reported to have been 118 and that by snakes 1,077, but in the reports of the Commissioners of Divisions reviewed in Government Resolution No. 2505, dated 7th July 1885, the numbers of these deaths were shown as 108 and 1,108 respectively. The Deputy Sanitary Commissioners derive their information on this matter from the village officers, while the Collectors derive it from the Police. It has already been directed that in future the Mámlatdárs and Chief Constables should compare and where necessary correct the figures supplied from the different sources.

Military Sanitary Works.

11. Section 8 of the report under review, which consists of extracts from the annual reports of Executive Engineers in charge of military stations, will, as usual, be considered by Government in the Military Department. The expenditure on military sanitary works incurred in 1884 amounted to Rs. 98,885 as compared with Rs. 1,74,733 in 1883. Large sums were expended on sanitary improvements in the cantonments at Ahmedabad, Nasirabad and Aden, while in eighteen other cantonments minor works were carried out.

12. The information regarding the sanitary condition of municipal towns has been abstracted from the Municipal Administration Reports, which have already been reviewed by Government in their Resolution No. 1167, dated 30th March 1885. During the year under review Municipalities were informed that the services of Lieut.-Colonel Ducat would be placed at the disposal of such as might desire them for the preparation and execution of designs for sanitary works on their undertaking to pay his salary and allowances during the period he might be so employed. His Excellency the Governor in Council has observed with satisfaction that the Municipalities of Hyderabad and Ahmedabad have already taken advantage of the offer.

Civil Sanitary Works.

13. During the year under review the Civil Surgeons in the several districts visited 102 towns and 4 villages and made many valuable suggestions regarding the improvement of their sanitation.

14. Orders have already been issued regarding most of the subjects discussed in Section X. of the report. The evidence of the non-contagiousness of cholera adduced by Mr. Hewlett is undoubtedly very strong. His Excellency in Council must however refrain from expressing any opinion how far Mr. Hewlett has succeeded in indicating the true origin of cholera and in proving that the disease is not contagious, as these questions are still subjects of controversy among experts, but it is admitted on all sides that the disease is fostered by filth and prevented or checked by cleanliness, and if this fact is persistently impressed on the people sanitary improvement will be facilitated.

15. *Vaccination*—The statistics of vaccination are given as usual for the financial year. The number of vaccinators employed in 1884-85 was 477 or 15 more than in 1883-84, of whom 275, including 20 candidate vaccinators, were paid from the Local Funds, 43 from Municipal Funds, 7 from Provincial and Cantonment Funds and the rest by Native States. The Local Fund Committees of Kolába, Belgaum, Dhárwár and Kaira have since the close of the year under review consented to entertain additional vaccinators in these districts, while provision has been made for the employment of an additional candidate vaccinator in the Sátára District. The States of Gadhinglaj, Panhála, Lunáváda, Sunth, Kadana, Pálanpur and Khairpur have not yet been provided with the full number of vaccinators considered necessary. The reports of Collectors and Presidents of Municipalities on the suggestion made by the Sanitary Commissioner in his report for the previous year regarding the entertainment of special vaccinators in all towns having a population of 10,000 and upwards have been disposed of by Government Resolution No. 3033, dated 12th instant.

Number of vaccinators.

16. The number of primary vaccinations fell from 826,965 in 1883-84 to 802,207 in 1884-85, but that of re-vaccinations rose from 56,874 in the former period to 63,361 in the latter. The only circles and districts in which there was an increase in the total number of vaccine operations performed during the year under review are the Western Registration District, Western Gujarát Circle and Cutch. Of the primary vaccinations 95·29 per cent. were successful and 2·01 per cent. unsuccessful, while in 2·70 per cent. the results were not ascertained. The percentage of successful re-vaccinations was 65·11. The increased protection of infants is very satisfactory, 63·41 per cent. of the total number of infants under one year of age having been successfully vaccinated in the year under review as compared with 61 per cent. in the previous year. Of the total number of primary vaccinations 65·56 were performed on infants under one year, 32·15 on children over one and under six years of age and 2·03 on persons above the latter age. Only one case of inoculation was reported in the year under review.

Number of operations.

17. The quality of the lymph received from England was found to be generally good. In the city of Bombay vaccination was carried on with animal lymph only. In Bándra, Poona, Jámnagar and in the Broach and Kaira Collectorates both animal and human lymph were used, but in all other places the operations were performed with human lymph only.

Lymph used.

18. The total expenditure on vaccination amounted to Rs. 2,79,703 or Rs. 9,965 more than in the previous year. The average cost of each successful operation was annas 5-9 or 4 pies more than in the previous year. The Sanitary Commissioner should be requested to explain the reason for the high average cost (annas 6 and pies 7) of the successful operations performed by municipal vaccinators as compared with that of operations performed by Government vaccinators (anna 1 and pies 8) or Local Fund vaccinators (annas 3).

Expenditure on vaccination.

19. His Excellency the Governor in Council observes with satisfaction that attention has been given to the instructions issued by the Government of India and by this Government regarding the reduction of the size of the report and is persuaded that the report under review is for practical utility not inferior to any which have preceded it. It indicates the deep interest which Mr. Hewlett continues to take in his important duties, and the energy and efficiency with which he has supervised the work of the officers subordinate to him. The Governor in Council notices with pleasure the praise accorded to the Deputy Sanitary Commissioners, whose duties have been increased in the year under review by the tabulation of the statistics in their offices, an arrangement which is reported to work admirably.

J. MONTEATH,
Under Secretary to Government.

To

The Sanitary Commissioner,
The Surgeon General with the Government of Bombay,
The Military Department of the Secretariat,
The Judicial Department of the Secretariat,
The Political Department of the Secretariat,
The Public Works Department of the Secretariat,
The Commissioner, N. D.,
The Commissioner, C. D.,
The Commissioner, S. D.,
The Commissioner in Sind,
All Collectors, including Collectors and Deputy Commissioners in Sind,
The Municipal Commissioner for the City of Bombay,
The Compiler of the General Administration Report for 1884-85,
The Accountant General.
} With copies of the report.

The Secretary of State for India,
The Government of India.
} By letter.

TWENTY-SECOND ANNUAL REPORT

OF THE

Sanitary Commissioner for the Government of Bombay,

1885,

WITH

APPENDICES.

Bombay:
PRINTED AT THE GOVERNMENT CENTRAL PRESS.

1886.

CONTENTS.

SECTION I.—METEOROLOGY—Nil.

SECTION II.—EUROPEAN ARMY—Nil.

SECTION III.—NATIVE ARMY—Nil.

SECTION IV.—JAILS—Nil.

SECTION V.

GENERAL POPULATION AND VITAL STATISTICS.

PARA.		PAGE.
1.	Transfer of the Head Quarters of the District of Kaládgi	1
2.	Alteration in the names of certain tálukás in Khándesh Collectorate ...	*id.*
	BIRTHS.	
3.	Number of registered births	1
4.	Birth-rate in 1885 compared with previous years from 1875 to 1884 ...	2
5.	Comparison between the number of births registered in each District and Collectorate for 1885 with the number for 1884 and the mean for 10 years	2, 3
6.	Birth registration in Urban and Rural Districts	3, 4
7.	Birth-rate in sequence in Towns	5, 6
8.	Births by months	6
9.	Population in Cantonments	6, 7
10.	Birth-rates in Cantonments...	7
11.	Still-born	7, 8
	DEATHS.	
12.	Number of deaths	8
13.	Death-rate	*id.*
14.	Male and female death-rates	*id.*
15.	Deaths by Districts	*id.*
16.	Deaths by Collectorates	9
17.	Death-rate by Collectorate in sequence	9, 10
18.	Do. by sexes	10
19.	Deaths by ages	10, 11
20.	Do. by caste or class	11
21.	Do. by causes	*id.*
22.	Do. by months	11, 12
23.	Number of Circles	12
	WESTERN REGISTRATION DISTRICT.	
	COLLECTORATE.	
24.	Khándesh	...12—14
25.	Násik	...15—17
26.	Thána	...17—19
27.	Bombay	... 19
28.	Kolába	...20—22

SECTION X.

PERSONAL PROCEEDINGS AND GENERAL REMARKS.

Para.		Page
142.	Personal Proceedings	107
143.	Insanitary condition of Surat City	*id.*
144.	City of Broach	*id.*
145.	Ahmedabad	*id.*
146.	Quetta	*id.*
147.	New form of Bill of Health ordered by the Government of India	107,108
148.	Procedure ordered	108
149.	Importance of sanitary condition of vessel recognised	*id.*
150.	Meaning to be attached to "satisfactory sanitary condition"	*id.*
151.	Annual Report of the Health Officer of the Port	*id.*
152.	Government orders regarding Health Officer's visits to ships	*id.*
153.	Government Resolution concerning vaccination of pilgrims arriving from sea.	*id.*
154.	Issue of Bills of Health on Form C. may be given under certain circumstances to hired transports	109
155.	Exemption of Native Troops and followers embarking for service from inspection by Health Officer of the Port	*id.*
156.	Correct number of pilgrims to be shown in Bill of Health	*id.*
157.	Different Bills of Health to be issued for certain ports	*id.*
158.	Return of Bills of Health granted or refused to be sent to Government and Municipality by the Health Officer of the Port	*id.*
159.	Vessels for Persian Gulf *viâ* Karáchi to obtain Bills of Health at Karáchi...	109
160.	Outgoing vessels	109—110
161.	Infectious disease	110
162.	Refusal of a Bill of Health	*id.*
163.	Every facility rendered by shipping agents and masters to enable the Health Officer to make a sanitary inspection of vessels	111
164.	Ships' bilges	*id.*
165.	Cause of discrepancy between number of Bills of Health issued and number of vessels inspected	*id.*
166.	Table showing the number of troop-ships provided during the year with Bills of Health without an inspection of the crews and passengers by the Health Officer of the Port	*id.*
167.	Health Officer has since 1st September issued Bills of Health, instead of Collector of Customs, to vessels bound for certain ports	*id.*
168.	Number of vessels with infectious disease on board	112
169—170.	Dr. MacCartie's remarks on pilgrim traffic	*id.*
171.	Necessity for preserving space allowed by law to each pilgrim free from baggage	*id.*
172.	Necessity for increasing space during monsoon	*id.*
173.	Table showing the number of pilgrims arrived from Jeddáh during the year 1885	113
174—175.	Sanitary condition of foreshore of Port of Bombay	*id.*
176.	Sanitary improvements still under consideration	113—114
177.	Cholera outbreak at Sailors' Home	114
178.	Table showing the number of cases of cholera reported during the year among the harbour population	*id.*
179.	Cholera not imported	*id.*
180.	Number of cases	*id.*
181.	Outbreak on board H. M. S. "Briton"	*id.*
182.	Difficulty regarding disinfection of vessels	*id.*
183.	A case of cholera in the Prince's Dock...	115
184.	Enormously high proportion of deaths to attacks	*id.*
185—190.	Cause of the high death-rate from cholera in Bombay ...	115—116
191—194.	Necessity for a floating hospital	116—117
195.	Cholera outbreak at Naples	117
196.	Cholera in Italy	*id.*
197.	Assistance afforded by Colonel Ducat, R.E.	*id.*
198—200.	Mortality in Ahmedabad during 11 years ending 1885 ...	117—119
201.	Colonel Ducat's tour in Sind	119
202.	Description of Hassall's Patent Safety Joint	119—121
203.	Mode of making Joint with Hassall's Patent Pipes	121
204.	Testimonial from Major Hector Tulloch, R.E.	122—123
205.	Prices of pipes	123
206.	Distribution of three sets of samples brought out to Bombay	*id.*
207.	Inability of some Municipalities to pay for Colonel Ducat's services according to the rate laid down by Government	*id.*
208.	Village sanitation	*id.*
209.	Government Resolution on village conservancy and sanitation ...	123—124

PARA.		PAGE.
210.	Difficulty may be expected at first which will pass off	124
211.	Necessity for affording means of acquiring elementary education ...	*id.*
212.	Measures for extension of education among females	*id.*
213.	The Countess of Dufferin's Fund	*id.*
214.	Unhealthy condition of the City of Poona	*id.*
215.	Danger of irrigation without drainage	124—125
216.	Work of Deputy Sanitary Commissioners	125
217.	Surgeon Major MacRury	*id.*
218.	Surgeon Channer	*id.*
219.	Surgeons Peacocke, Street and Clarkson	*id.*
220.	Dr. Colah	*id.*
221.	Surgeon Parker	125—126
222.	Surgeon Tully	126
223.	Surgeon MacCartie	*id.*
224.	Assistant Surgeons Sukhárám Arjun and Desái	*id.*
225.	Inspection by Civil Surgeons	*id.*

APPENDIX I.

GENERAL HISTORY OF VACCINATION.

1.	Changes amongst the Supervising Officers	1
2.	Strength of the Department	*id.*
3.	Work amongst the Civil and Military Population	2
4.	The number of the infants successfully vaccinated in each Collectorate ...	*id.*
5.	Primary Vaccinations	3
	Results in Primary Vaccinations	4
6.	Re-vaccinations...	*id.*
	Results in Re-vaccinations...	*id.*
7.	Total Operations	*id.*
	Results in Total Operations	*id.*
8.	Primary Vaccinations, Re-vaccinations, and Total Operations by Districts and Circles	5
9.	Primary Vaccinations. Increase and Decrease by Districts and Circles ...	*id.*
10.	Re-vaccinations. Increase and Decrease by Districts and Circles ...	*id.*
11.	Total Operations. Do. do.	*id.*
12.	Particulars of Vaccine Operations by caste, age, sex and result, with their percentages according to Districts and Circles	8
13.	Caste	*id.*
14.	Age	9
15.	Infants successfully vaccinated as compared with those available for vaccination by Districts and Circles at the rate of 31 per *mille* of Population...	*id.*
16.	Sex...	10
17.	Results	*id.*
18.	Percentages of success reviewed by Districts and Circles	11
19.	Rate per *mille* of Population protected by Primary Vaccinations by Districts and Circles	*id.*
20.	Vaccinations by Establishments	12
21.	Results in Vaccine Operations by Establishments	*id.*
22.	Percentages of success reviewed by Establishments	13
23.	Work of Establishments by Districts and Circles	*id.*
24.	Work of Government Vaccinators	*id.*
25.	Work of Cantonment Vaccinators	*id.*
26.	Work of Municipal Vaccinators	14
	Necessity for special Vaccinators for Towns having a population of 10,000...	*id.*
27.	Work of Local Fund Vaccinators	15
28.	Work of Native State Vaccinators	*id.*
	States that require additional Vaccinators	*id.*
29.	Work of Dispensary Officers	16
30.	Work performed in the Army generally	*id.*
31.	European Troops	17
32.	Native Troops	18
33.	Average number of Operations per each kind of Establishment ...	*id.*
34.	Average number of Operations per Vaccinator by Districts and Circles ...	*id.*
35.	English Lymph	19
36.	Quality of the Lymph in use	*id.*
37.	Lymph supplied	*id.*
38.	Animal Vaccination	20
39.	Expenditure	21
40.	Cost of each successful case, including all charges	*id.*

PARA.		PAGE.
41.	Cost of each successful case after deducting the pay of the Supervising Officers by Districts and Circles	21
42.	Work of Deputy Sanitary Commissioners and Superintendents of Vaccination.	22
43.	Inspections from Vaccination Registers	*id.*
	Truthfulness of Vaccination Registers	23
	Classification of successful cases	*id.*
	Inspections without Vaccination Registers	*id.*
44.	Remarks on the work of the Supervising Officers	*id.*
45.	Work of Inspectors and Assistant Superintendents	*id.*
	Their conduct	24
46.	Total Inspections	*id.*
47.	Conduct of Vaccinators	*id.*
48.	Clerks	*id.*
49.	Inoculation	*id.*
50.	Ill-effects by Vaccination	*id*
51.	Aid from Civil, Revenue, and Political Officers	*id.*
52.	Small-pox by Collectorates and Registration Districts	*id.*
53.	Small-pox occurring after Vaccination	*id.*
54.	Progress in the Western Registration District	26
55.	Do. Khándesh Collectorate	*id.*
56.	Do. Násik do.	27
57.	Do. Thána do.	*id.*
58.	Do. Kolába do.	*id.*
59.	Do. Native States in the Western Registration District ...	*id.*
60.	Do. Presidency Circle	*id.*
61.	Do. Central Registration District	28
62.	Do. Ahmednagar Collectorate	*id.*
63.	Do. Poona do.	*id.*
64.	Do. Sholápur do.	*id.*
65.	Do. Sátára do.	*id.*
66.	Do, Ratnágiri do.	29
67.	Do. Native States in the Central Registration District ...	*id.*
68.	Do. Southern Registration District	*id.*
69.	Do. Belgaum Collectorate	*id.*
70.	Do. Dhárwár do.	*id.*
71.	Do. Bijápur do.	30
72.	Do. Kánára do.	*id.*
73.	Do. Native States in the Southern Registration District ...	*id.*
74.	Do. Eastern Gujarát Registration District	*id.*
75.	Do. Surat Collectorate	*id.*
76.	Do. Broach do.	*id.*
77.	Do. Kaira do.	*id.*
78.	Do. Panch Mahále	*id.*
79.	Do. Ahmedabad Collectorate	*id.*
80.	Do. Native States in the Eastern Gujarát Registration District ...	32
81.	Do. Western Gujarát Circle	*id.*
82.	Do. Province of Káthiáwár	*id.*
83.	Do. Pálanpur States	*id.*
84.	Do. Sind Registration District	33
85.	Do. Karáchi Collectorate	*id.*
86.	Do. Hyderabad do.	*id.*
87.	Do. Thar and Párkar	*id.*
88.	Do. Shikárpur Collectorate	*id.*
89.	Do. Upper Sind Frontier	34
90.	Do. Khairpur State	*id.*
91.	Do. Baroda Circle	*id.*
92.	Do. Cutch do.	*id.*
93.	Do. Aden	*id.*
94.	Do. Khelát, Muskat and Bushire	*id.*
95.	Tour of Deputy Sanitary Commissioners and Superintendent of Vaccination.	35
96.	The Bombay Vaccination Act No. I. of 1877	*id.*
97.	Karáchi Vaccination Act	36
98.	Suggestions for the more effectual spread of Vaccination	*id.*

APPENDIX II.

GENERAL POPULATION AND VITAL STATISTICS.

Births registered in the Districts during 1885	... ...	2
Deaths do. do.	... ...	*id.*

PAGE.

Deaths registered in the Districts during each month of the year 3
Do. in do. according to age ... ... *id.*
Do. in do. according to classes... 4
Deaths from different causes in the Districts and Towns during 1885 ... 4—6
Do. from cholera in the Districts during each month of the year ... 6
Do. from small-pox do. do. ... 7
Do. from fever do. do. ... ... *id.*
Do. from bowel-complaints in do. do. 8

VACCINATION.

Particulars of Vaccination during 1885-86 ... ... 9—19
Cost of the Department during the year ... ...20—21
Dispensary Vaccination during the year ... ...22—27
Comparative Statement showing the number of persons primarily vaccinated and the number of persons successfully vaccinated in each year from 1876-77 to 1885-86 28

ANNUAL SANITARY REPORT FOR 1885.

SECTION I.—METEOROLOGY.—No remarks.

SECTION II.—EUROPEAN ARMY.—No remarks.

SECTION III.—NATIVE ARMY.—No remarks.

SECTION IV.—JAILS.—No remarks.

These sections are omitted from this report: (*vide* Government of India Resolution No. 118, dated 27th June 1878).

SECTION V.

GENERAL POPULATION AND VITAL STATISTICS.

Transfer of the Head-Quarters of the District of Kaládgi.

Under Government Resolution in the Revenue Department, No. 4919, dated 18th June 1884, the designation of the Collectorate formerly known as Kaládgi Collectorate is now altered to that of the Bijápur Collectorate.

Alteration in the names of certain tálukás in Khándesh Collectorate.

2. Under Government Resolution in the Revenue Department, No. 1260, dated 11th February 1885, the names of the Nasirabad and Virdel tálukás in Khándesh Collectorate have been altered to Jalgaon and Sindkheda respectively.

BIRTHS.

Number of registered births.

3. In the Presidency of Bombay, including Sind, during the year 1885 the births of 298,406 males and 274,025 females, or a total of 572,431 children, were recorded against 278,986 boys and 255,737 girls, or a total of 534,723 children in 1884. The recorded births for 1885 are thus 37,708 in excess of those for the previous year, whilst they exceed the mean of the preceding 10 years ending 1884 by 183,681.

Birth-rate in 1885 compared with previous years from 1875 to 1884.

4. The following table shows the number of births registered in each year from 1875 to 1885, their ratios per 1,000 of population, and the proportion of males to females:—

Years.	Number of Births registered.			Ratio per 1,000 of Population.			In every 100 Births there were		For every 100 Male Births the Females were
	Males.	Females.	Children.	Males.	Females.	Children	Males.	Females.	
1875	178,892	161,937	340,829	11·05	10·01	21·06	52·49	47·51	90·52
1876	181,872	163,612	345,484	11·24	10·11	21·35	52·64	47·36	89·96
1877	164,262	147,399	311,661	10·15	9·11	19·26	52·75	47·25	89·73
1878	128,848	114,405	243,253	7·96	7·07	15·03	52·97	47·03	88·79
1879	151,460	136,410	287,870	9·33	8·41	17·74	52·61	47·39	90·06
1880	195,285	175,588	370,873	12·03	10·82	22·85	52·66	47·34	89·91
1881	239,912	219,745	459,657	14·58	13·35	27·93	52·19	47·81	91·59
1882	255,927	235,419	491,346	15·55	14·31	29·86	52·09	47·91	91·98
1883	261,966	239,835	501,801	15·92	14·58	30·50	52·20	47·80	91·55
1884	278,986	255,737	534,723	16·96	15·54	32·50	52·17	47·83	91·67
Mean for 10 years ...	203,741	185,009	388,750	12·48	11·34	23·82	52·41	47·59	90·81
1885 ...	298,406	274,025	572,431	18·14	16·65	34·79	52·13	47·87	91·83

It is satisfactory to notice the progressive improvement that, except in the three years of famine, has taken place in the registration of births.

Comparison between the number of births registered in each District and Collectorate for 1885 with the number for 1884 and the mean for 10 years.

5. The next table shows the number of births registered in 1885 in each district and Collectorate of the Presidency contrasted with those for 1884 and the mean for 10 years:—

Districts.	Number.	Collectorates.	Population according to Census of 1881.	Mean for 10 years, 1875-84. Number of Births.	Mean for 10 years, 1875-84. Ratio per 1,000 of Population.	1884. Number of Births.	1884. Ratio per 1,000 of Population.	1885. Number of Births.	1885. Ratio per 1,000 of Population.
Western Registration District.	1	Khándesh	1,237,231	31,146	28·01	45,110	36·51	48,598	39·28
	2	Násik	731,206	21,677	28·73	20,263	27·62	29,947	38·33
	3	Thána	807,267	19,560	25·18	24,644	30·52	22,559	27·94
	4	City of Bombay	773,196	14,645	21·04	14,377	18·59	14,685	18·99
	5	Kolába	482,830	10,119	22·10	13,326	27·60	13,483	27·92
Central Registration District.	6	Ahmednágar	751,228	22,951	30·01	30,536	40·65	32,444	43·19
	7	Poona	990,621	20,384	22·62	30,741	34·13	32,914	36·54
	8	Sholápur	582,437	14,378	21·66	23,223	39·87	25,838	44·36
	9	Sátára	1,062,350	32,491	30·61	45,484	42·81	48,467	45·62
	10	Ratnágiri	997,090	16,493	16·42	20,599	20·66	24,175	24·25
Southern Registration District.	11	Belgaum	864,014	26,007	29·61	35,139	40·67	37,949	43·92
	12	Dhárwár	882,907	27,275	29·67	38,342	43·43	42,201	47·80
	13	Bijápur	638,493	15,616	20·95	24,847	38·91	28,571	44·75
	14	Kánara	421,840	11,767	28·86	12,327	29·22	12,596	29·86
Eastern Gujárát Registration District.	15	Surat	614,198	17,446	28·60	21,455	34·93	23,031	37·49
	16	Broach	328,930	7,676	22·51	11,454	35·03	12,459	38·11
	17	Kaira	804,800	22,754	28·75	30,225	37·56	31,287	38·87
	18	Panch Mahále	255,479	6,036	24·47	8,926	34·94	9,997	39·13
	19	Ahmedabad	856,324	20,440	24·32	28,844	33·68	32,474	37·92
Sind Registration District.	20	Karáchi	478,658	6,455	14·49	10,637	22·22	10,368	21·66
	21	Hyderabad	754,624	7,391	10·06	12,757	16·91	13,858	18·36
	22	Thar and Párkar	203,944	3,640	19·18	5,924	24·64	6,671	32·81
	23	Shikárpur	832,989	9,687	11·88	17,905	20·99	16,232	19·03
	24	Upper Sind Frontier	124,181	1,116	10·77	2,488	20·03	1,635	13·17

ABSTRACT.

Western Registration District..	4,081,830	97,147	25·59	123,780	30·32	129,269	31·67	
Central do.	4,293,716	106,797	24·24	160,583	35·07	163,838	38·15	
Southern do. do.	3,807,254	82,265	27·35	110,655	39·42	121,317	43·22	
Eastern Gujarát do. do.	2,857,731	74,352	26·28	100,904	35·31	109,248	38·23	
Sind do. do.	2,413,823	28,189	12·36	48,891	20·22	48,759	20·20	
Presidency ..	16,454,414	388,750	23·82	534,723	32·50	572,431	34·79	

It will be seen from the abstract of the above table that the number of births recorded in 1885 is higher in each of the districts than that recorded in the previous year, except in Sind, in which the number (48,759) is lower by only 42 than in 1884 (48,801).

The total increase for the Presidency was 10·97 per 1,000 of population above the mean of the preceding 10 years, and the number of recorded births in 1885 is higher than in 1884 in the following 20 Collectorates, *viz*:—

Khándesh.	Dhárwár.
Násik.	Bijápur.
City of Bombay.	Kánara.
Kolába.	Surat.
Ahmednagar.	Broach.
Poona.	Kaira.
Sholápur.	Panch Maháls.
Sátára.	Ahmedabad.
Ratnágiri.	Hyderabad.
Belgaum.	Thar and Párkar.

The Collectorates in which there was a falling off as compared with 1884 are as follows:—

Collectorates.	1884.	1885.
Thána	24,644	22,559
Karáchi	10,637	10,368
Shikarpur	17,905	16,232
Upper Sind Frontier	2,488	1,635

The extremely defective state of the registration of births in the City of Bombay and the steady decrease year by year since 1880 was noticed in last year's report. In 1885 there was a slight increase of 308 in the number of births (14,685) over the number registered in 1884 (14,377). The measures taken by the Municipal Commissioner to secure a correct registration of births are evidently inadequate for the purpose, and as it is one of importance I hope Government may be pleased to call his especial attention to the subject, as it is certainly not right that the leading Municipality in this Presidency should occupy such a very low place on the list of towns as regards registration of births.

Birth-registration in Urban and Rural Districts.

6. The birth-rate per 1,000 of population in the urban and rural population in each Collectorate of the Presidency during the year 1884 and 1885 is given in the following table:—

Collectorates.	Urban and Rural.	Population.	1884.	1885.
Khándesh	Urban... ...	49,465	16·35	21·95
	Rural	1,187,766	37·35	40·00
Násik	Urban... ...	48,535	22·68	22·03
	Rural	732,671	34·34	39·41
Thána	Urban... ...	27,366	14·73	13·30
	Rural	780,001	31·08	28·45
City of Bombay	Urban... ...	773,196	18·59	18·99
	Rural	.....	...	...
Kolába	Urban... ...	23,531	20·19	20·57
	Rural	459,299	27·98	28·31
Ahmednagar	Urban... ...	46,288	32·20	31·52
	Rural	704,940	41·11	43·95
Poona	Urban... ...	147,376	19·03	27·96
	Rural	753,245	37·09	38·23
Sholápur	Urban... ...	92,926	25·82	25·15
	Rural	489,561	42·54	48·00
Sátára	Urban... ...	51,482	30·28	32·11
	Rural	1,010,868	43·45	46·31
Ratnágiri	Urban... ...	21,563	27·78	27·13
	Rural	975,527	20·50	24·18

Collectorates.	Urban and Rural.	Population.	1884.	1885.
Belgaum	Urban... ...	54,190	29·23	30·15
	Rural	809,824	41·43	44·84
Dhárwár	Urban... ...	91,071	37·32	39·72
	Rural	791,836	44·13	48·73
Bijápur	Urban... ...	7,024	22·35	20·50
	Rural	631,469	39·10	45·17
Kánara	Urban... ...	24,390	33·33	33·99
	Rural	397,450	28·97	29·61
Surat	Urban... ...	123,073	33·43	32·81
	Rural	491,125	35·31	38·67
Broach	Urban... ...	48,760	33·55	34·66
	Rural	278,170	35·29	38·71
Kaira	Urban... ...	67,614	30·13	29·16
	Rural	737,186	38·24	39·78
Panch Mahále	Urban... ...	25,736	20·09	22·53
	Rural	229,743	36·60	40·99
Ahmedabad	Urban... ...	171,390	41·51	38·79
	Rural	684,934	31·72	37·70
Karáchi	Urban... ...	68,332	46·64	44·72
	Rural	410,356	18·15	17·82
Hyderabad	Urban... ...	45,195	24·56	28·23
	Rural	709,429	16·42	17·73
Thar and Párkar	Urban... ...	2,828	21·22	22·63
	Rural	200,516	24·71	32·95
Shikárpur	Urban... ...	83,073	20·96	19·06
	Rural	769,913	20·99	19·03
Upper Sind Frontier ...	Urban... ...	11,352	18·50	12·33
	Rural	112,829	20·19	13·25
Presidency ...	Urban... ...	2,105,756	25·53	26·17
	Rural	14,348,658	33·52	39·90

This table shows that in 1885 the recorded birth-rates among the urban and rural populations of the Presidency were respectively 26·17 and 39·90 against 25·53 and 33·52 in 1884. It also shows that the birth-rates recorded among the rural population of each Collectorate, except Ratnágiri, Kánara, Ahmedabad, Karáchi and Hyderabad, were higher than the birth-rates registered in the urban circles. In 1884 the same fact was observed in the above Collectorates.

In the following Collectorates a much higher birth-rate was registered in the rural than in the urban circles :—

Collectorates.	Birth-rate per 1,000.	
	Rural.	Urban.
Bijápur	45·17	20·50
Sholápur	48·00	25·15
Khándesh	40·00	21·95
Panch Mahále	40·99	22·53
Násik	39·41	22·03
Thána	28·45	13·30
Belgaum	44·84	30·15
Sátára	46·31	32·11
Ahmednagar	43·95	31·52

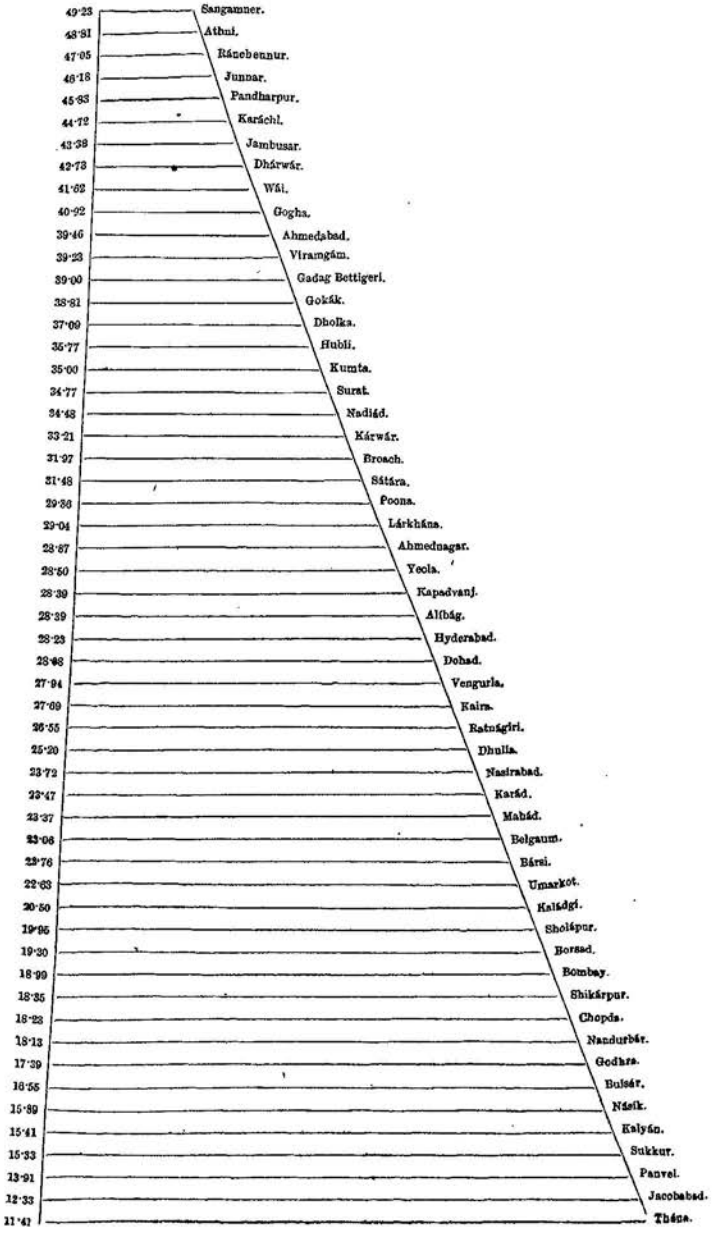
whilst in the under-mentioned 5 Collectorates the reverse is the case ; and the birth-rates in the rural circles are lower than in the urban.

Collectorates.	Urban.	Rural.
Karáchi	44·72	17·82
Hyderabad	28·23	17·73
Kánara	33·99	29·61
Ratnágiri	27·13	24·18
Ahmedabad	38·79	37·70

Birth-rate in sequence in towns.

7. The following table shows the recorded birth-rate in each town in the Presidency arranged in sequence of the highest birth-rate per 1,000 of population :—

Recorded Birth-rate in towns per 1,000 of Population.



It will be seen that out of 55 towns in the Presidency only 10 have returned a birth-rate exceeding 40 per 1,000. In 1884 there were 12 towns in which the recorded birth-rate was over 40 per 1,000. An improvement is noticed in some of the towns, especially Poona, which has returned a birth-rate of 29·36 against 15·88 in 1884, but it is evident that this important subject was much neglected and, singularly enough, as pointed out last year, in the Head-quarter towns, where one would have supposed the wishes of Government would have been more strictly attended to. For example, in the town of Sholápur, a birth-rate of only 19·95 per 1,000 against 19·49 in 1884 is recorded, in the town of Násik the birth-rate was 15·89 against 17·59 in 1884 and at Thána 11·41 against 15·98 in 1884. I hope that Government may be pleased to point out to the Municipalities which have returned such low birth-rates that they are not performing their duty properly by such neglect, and to impress on them the absolute necessity of much greater attention being paid to this most important subject. The birth-rates in each táluka of each Collectorate will be considered further on in the report. The undermentioned Municipalities deserve credit for the attention they have paid to the registration of births:—

Collectorates.	Municipal Towns.	Birth-rate.
Ahmednagar	Sangamner	49·23
Poona	Junnar	46·18
Sholápur	Pandharpur	45·83
Sátára	Wái	41·62
Belgum	Athni	48·81
Dhárwár	Dhárwár	42·73
	Ránebennur	47·05
Broach	Jambusar	43·38
Ahmedabad...	Gogha...	40·92
Karáchi	Karáchi	44·72

Births by months.

8. The following table shows the monthly distribution of births in 1885 as compared with 1884 and with the monthly mean of the previous 10 years:—

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Mean for 10 years, 1875—84.	29,227	26,831	30,487	30,537	32,109	33,487	35,590	35,034	34,462	34,762	33,832	32,412	388,750
1884	37,582	36,359	41,965	41,761	44,843	49,175	48,168	48,397	45,748	48,672	46,568	45,090	534,722
1885	44,270	42,380	50,125	49,234	51,124	51,147	49,324	48,700	46,101	48,234	47,516	46,296	572,431

In 1885 the greatest number of births (51,147) was registered in June and the least (42,380) in February. The largest number of births usually occurs in the month of July, so that this year it is somewhat abnormal.

Population in the Cantonments.

9. The civil population residing in each Military Cantonment were not separated from the military population in the Census Report for 1881, and as the Sanitary Commissioner's returns only refer to the civil population, Cantonment Magistrates were asked to be so good as to give information regarding the civil population by age, caste, and also to state the area of, and the total number of Native civilians residing within the limits of, each Cantonment. The Cantonment Magistrates, Máleg aon and Ahmednagar, furnish the same population as was shown in the Census Report, and the Cantonment Magistrate at Belgaum says he is unable to supply the information. The other Cantonment Magistrates return the total population for the area embraced by birth and death registers as follows:—

Cantonments.	Population as given in the Census Report for 1881.	Population as now furnished.
Devláli	2,969	1,086
Poona	30,129	25,042
Kirkee	7,252	3,560
Ahmedabad	2,854	1,940

Birth-rates in Cantonments.

10. The following table contrasts the recorded birth-rate in each Cantonment in British territory in 1884 and 1885. The ratio is calculated on the population as furnished by the Cantonment Magistrates:—

Cantonments.	Birth-rate, 1884.	Birth-rate, 1885.
Devláli	33·15	36·83
Málegaon...	32·80	37·57
Ahmednagar	17·21	16·56
Poona	27·07	24·96
Kirkee	26·68	25·84
Belgaum	13·25	16·18
Ahmedabad	11·34	17·53

The recorded birth-rate in each of the Cantonments is below the standard (40 per 1,000). The recorded birth-rate in 1885 is in excess of that for 1884 in each of the Cantonments, except Ahmednagar, Poona and Kirkee.

Still-born.

11. During 1885, 5,182 boys and 4,266 girls, or a total of 9,448 children, against 5,784 boys and 4,848 girls, or a total of 10,632 in 1884, were registered as still-born. These births occurred in the following Collectorates:—

Collectorates.	Recorded Births.	Still-born.			Percentage of Still-born to born Alive.
		Urban.	Rural.	Total.	
Khándesh	48,595	3	697	700	1·44
Násik	29,947	45	654	699	2·33
Thána	22,559	1	112	113	0·50
City of Bombay	14,685	1,268	...	1,268	8·63
Kolába	13,483	...	323	323	2·40
Ahmednagar	32,444	14	240	254	0·78
Poona	32,914	65	199	264	0·80
Sholápur	25,838	11	233	244	0·94
Sátára	48,467	43	560	603	1·24
Ratnágiri	24,175	11	323	334	1·38
Belgaum	37,949	44	472	516	1·36
Dhárwár	42,201	102	693	795	1·88
Bijápur	28,571	11	370	381	1·33
Kánara	12,596	34	652	686	5·45
Surat	23,031	268	156	424	1·84
Broach	12,459	50	122	172	1·38
Kaira	31,287	8	183	191	0·61
Panch Mahále	9,997	7	91	98	0·98
Ahmedabad	32,474	247	321	568	1·75
Karáchi	10,368	117	150	267	2·57
Hyderabad	13,853	39	132	171	1·23
Thar and Párkar	6,671	3	64	67	1·00
Shikárpur	15,745	66	227	293	1·86
Upper Sind Frontier	2,122	10	7	17	0·86
Presidency ...	572,431	2,467	6,981	9,448	1·65

A high percentage of still-born to born alive is still noticed in the city of Bombay (8·63) and in Kánara (5·45). The Deputy Sanitary Commissioner, Southern Registration District, is engaged in investigating into the cause of the high rate of still-born children in Kánara.

DEATHS.

Number of deaths.

12. In 1885 among the civil population in the Rural, Town and Cantonment Circles of the Presidency of Bombay the deaths of 248,829 males and 224,762 females or a total of 473,591 persons were recorded. In the previous year 408,409, or 65,182 less than in 1885, were registered. The following statement shows the number of deaths registered in each year since 1875:—

1875	...	... 375,718	1881	...	... 381,450
1876	...	... 368,260	1882	...	... 343,418
1877	...	... 627,708	1883	...	... 420,198
1878	...	... 532,951	1884	...	... 408,409
1879	...	... 387,542	1885	...	... 473,591
1880	...	... 328,673			

excluding the famine years 1877-78, the recorded deaths in 1885 were more numerous than in any year of the series.

Death-rate.

13. The computed death-rate per 1,000 of population in 1885 was 28·78 against 24·82 in 1884 and a decennial mean of 25·58. Omitting Sind, where the mortuary registration is extremely defective, the recorded death-rate in the other parts of the Presidency amounted to 30·34 per 1,000 of population.

Male and Female Death-rates.

14. The millesimal ratio of males dying to males living was 29·28 and of females dying to females living 28·25. In 1884 these ratios were respectively 25·23 and 24·39. For every 100 females who died, 110·71 deaths among males were registered, but these proportions vary considerably in the following Collectorates:—

In Khándesh the ratio of male to female deaths was 113·95 per cent.
„ Kaira do. do. do. 116·10 „
„ Panch Mahále do. do. do. 113·44 „
„ Ahmedabad do. do. do. 115·14 „

As usual the greatest discrepancy is to be found in Sind:—

In Karáchi 131·13 male deaths were recorded for every 100 female deaths.
„ Hyderabad 131·63 do. do. do. do.
„ Thar and Párkar 140·11 do. do. do. do.
„ Shikárpur 132·91 do. do. do. do.
„ Upper Sind Frontier 140·68 do. do. do.

Deaths by Districts.

15. The following table shows for each registration district the population enumerated at the census of 1881, the number of deaths recorded in 1885 by sexes, and their ratios per 1,000 of population. The highest ratio was reported in the Eastern Gujarát Registration District and the lowest in Sind:—

Districts.	Population according to Census of 1881.			Number of Deaths.			Ratio per 1,000 of Population.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
Western Registration District...	2,154,823	1,927,007	4,081,830	62,680	56,709	119,389	29·13	29·43	29·25
Central do. do. ...	2,137,095	2,156,681	4,293,776	66,323	62,263	128,656	31·07	28·87	29·96
Southern do. do. ...	1,417,136	1,390,118	2,807,254	43,737	41,872	85,609	30·86	30·12	30·49
Eastern Gujarát do. do. ...	1,471,834	1,385,897	2,857,731	48,875	43,472	92,347	33·21	31·37	32·31
Sind do. do. ...	1,316,830	1,096,993	2,413,823	27,144	20,446	47,590	20·61	18·64	19·72
Presidency ...	8,407,718	7,956,696	16,454,414	248,829	224,762	473,591	29·28	28·25	28·78

16. The next table shows the recorded deaths in each Collectorate in 1885 as compared with 1884 and the mean of the previous 10 years:—

Deaths by Collectorates.

Districts.	Number.	Collectorates.	Population according to Census of 1881.	Mean for 10 years, 1875-84. Number of Deaths.	Mean for 10 years, 1875-84. Ratio per 1,000 of Population.	1884. Number of Deaths.	1884. Ratio per 1,000 of Population.	1885. Number of Deaths.	1885. Ratio per 1,000 of Population.
Western Registration District.	1	Khándesh	1,237,231	29,014	26·09	26,879	21·73	36,329	29·37
	2	Násik	781,206	20,273	26·92	19,194	24·57	29,281	37·47
	3	Thána	807,367	17,741	22·33	19,042	24·33	21,736	26·92
	4	City of Bombay	773,196	22,925	32·94	22,237	28·82	21,481	27·89
	5	Kolába	482,830	9,306	20·32	10,540	21·83	10,472	21·69
Central Registration District.	6	Ahmednagar	751,228	21,799	28·50	19,149	25·49	25,633	34·12
	7	Poona	909,621	21,159	23·41	21,332	23·68	30,033	33·35
	8	Sholápur	582,487	18,651	28·10	14,589	25·04	21,369	36·69
	9	Sátára	1,062,350	28,247	26·61	28,271	26·61	36,663	34·80
	10	Ratnágiri	997,090	17,783	17·60	15,798	15·84	14,653	14·70
Southern Registration District.	11	Belgaum	864,014	31,506	34·44	27,993	32·40	27,646	32·00
	12	Dhárwár	882,967	32,410	34·26	30,170	34·17	28,829	32·65
	13	Bijápur	688,493	23,316	31·28	16,327	25·07	16,139	25·24
	14	Kánara	421,840	13,489	33·03	12,660	30·01	13,014	30·85
Eastern Gujarát Registration District.	15	Surat	614,198	16,866	27·65	17,039	27·74	18,052	29·39
	16	Broach	326,930	10,360	30·33	11,493	35·15	12,392	37·90
	17	Kaira	804,800	22,476	28·39	23,023	28·60	27,728	34·45
	18	Panch Mahála	255,479	5,651	22·91	4,983	19·50	5,477	21·44
	19	Ahmedabad	856,324	24,273	28·89	25,352	29·60	28,698	33·51
Sind Registration District.	20	Karáchi	478,688	7,238	16·24	8,419	17·59	12,712	26·56
	21	Hyderabad	754,624	9,511	12·67	11,897	15·77	14,875	19·84
	22	Thar and Párkar	203,344	2,755	14·52	3,163	15·55	2,951	14·51
	23	Shikárpur	852,086	10,085	12·49	10,217	19·01	15,053	17·64
	24	Upper Sind Frontier	124,181	978	9·43	1,992	16·04	1,899	15·29

ABSTRACT.

Western Registration District	4,081,830	99,259	26·15	98,542	24·14	119,389	29·25
Central do. do.	4,293,776	107,660	24·44	99,139	23·09	128,656	29·96
Southern do. do.	2,807,254	100,521	33·42	87,150	31·04	85,509	30·49
Eastern Gujarát do. do.	2,857,731	79,626	28·14	81,890	28·65	92,347	32·31
Sind do. do.	2,413,823	30,367	13·31	41,888	17·27	47,520	19·72
Presidency ..	16,454,414	417,433	25·58	408,469	24·82	473,521	28·78

Khándesh.	Surat.
Násik.	Broach.
Thána.	Kaira.
Ahmednagar.	Panch Mahála.
Poona.	Ahmedabad.
Sholápur.	Karáchi.
Sátára.	Hyderabad.

In the 14 marginally noted Collectorates the recorded death-rate per 1,000 of population was higher than in 1884, the difference being most marked.

In Khándesh, where 29·37 deaths per 1,000 were registered, against 21·73 in 1884.
„ Násik do. 37·47 do. do. 24·57 do.
„ Ahmednagar do. 34·12 do. do. 25·49 do.
„ Poona do. 33·35 do. do. 23·68 do.
„ Sholápur do. 36·69 do. do. 25·04 do.
„ Sátára do. 34·80 do. do. 26·61 do.
„ Kaira do. 34·45 do. do. 28·60 do.
„ Karáchi do. 26·56 do. do. 17·59 do.

It was also higher than the annual mean of the preceding 10 years in the following 16 out of the 24 Collectorates, *viz*:—

Khándesh.	Surat.
Násik.	Broach.
Thána.	Kaira.
Kolába.	Ahmedabad.
Ahmednagar.	Karáchi.
Poona.	Hyderabad.
Sholápur.	Shikárpur.
Sátára.	Upper Sind Frontier.

17. The next table shows the deaths in 1885 by Collectorates in sequence of highest rates, which range from 37·90 per 1,000 in Broach to 14·51 in Thar and Párkar. In 1884 the maximum and minimum ratios (35·15 and 15·55 per 1,000 respectively) were in these Collectorates:—

Death-rate by Collectorates in sequence.

Collectorates.	Number of Deaths.			Ratio per 1,000 of Population.		
	Male.	Female.	Persons.	Male.	Female.	Persons.
Broach	6,491	5,901	12,392	38·53	37·24	37·90
Násik...	15,310	13,971	29,281	38·52	36·40	37·47
Sholápur	11,074	10,295	21,369	37·56	35·79	36·69
Sátára	18,786	18,182	36,968	35·28	34·32	34·80
Kaira...	14,897	12,831	27,728	34·91	33·94	34·45
Ahmednagar...	13,394	12,239	25,633	35·10	33·11	34·12
Ahmedabad	15,359	13,339	28,698	34·95	31·99	33·51
Poona	15,557	14,476	30,033	34·18	32·49	33·35
Dhárwár	14,627	14,202	28,829	33·09	32·21	32·65
Belgaum	14,201	13,445	27,646	32·68	31·30	32·00
Kánara	6,773	6,241	13,014	31·37	31·39	30·85
Surat...	9,217	8,835	18,052	30·11	28·66	29·39
Khándesh	19,354	16,985	36,339	30·60	28·08	29·37
City of Bombay	11,233	10,328	21,561	24·17	33·49	27·89
Thána	11,329	10,407	21,736	27·23	26·52	26·92
Karáchi	7,212	5,500	12,712	27·11	25·86	26·56
Bijápur	8,136	7,984	16,120	25·62	24·88	25·24
Kolába	5,454	5,018	10,472	22·34	21·02	21·69
Panch Mahóls	2,911	2,566	5,477	22·19	20·64	21·44
Hyderabad	8,510	6,465	14,975	20·90	18·61	19·84
Shikárpur	8,590	6,463	15,053	18·63	16·49	17·64
Upper Sind Frontier ...	1,110	789	1,899	15·82	14·61	15·29
Ratnágiri	7,582	7,071	14,653	16·03	13·49	14·70
Thar and Párkar	1,722	1,229	2,951	15·32	13·51	14·51
Presidency ...	248,829	224,762	473,591	29·28	28·25	28·78

Deaths by sexes.

18. This statement also shows that in the City of Bombay alone the death-rate for females is higher than the death-rate for males, and in Kánara Collectorate the death-rates of males and females are the same. In the remaining Collectorates the death-rate for males everywhere exceeds that for females. In 1884 the female death-rate exceeded that of males in Kánara, City of Bombay and Upper Sind Frontier.

Deaths by ages.

19. The figures given below show the total deaths in 1885 under different ages, as also the ratio per 1,000 living, calculated on the population of each age period enumerated at the census of 1881, and the percentage on total deaths :—

Ages.	Population according to Census of 1881.	Deaths.	Ratio per 1,000 of Population.	Percentage on Total Deaths.
Under 1 year...	457,644	100,609	219·84	21·24
1 and under 5 years	1,714,283	99,639	58·12	21·04
5 do. 10 „	2,387,644	24,114	10·10	5·09
10 do. 15 „	1,877,474	13,299	7·08	2·81
15 do. 20 „	1,287,360	15,660	12·16	3·31
20 do. 30 „	2,984,550	44,524	14·92	9·40
30 do. 40 „	2,459,456	43,079	17·52	9·10
40 do. 50 „	1,543,353	37,354	24·20	7·89
50 do. 60 „	1,000,059	38,333	38·33	8·09
60 years and upwards	742,591	56,980	76·73	12·03
Total ...	16,454,414	473,591	27·78	100·

The mortality amongst infants under 1 year and children above one year but under 5 is, as usual, terribly high, in comparison with other periods of life. In fact, the deaths in children under 5 years of age formed 42·28 per cent. of the total deaths. As pointed out last year, the extremely high rate of mortality among

children of tender years affords unmistakeable proof of local causes of insanitation throughout the Presidency. The period of greatest immunity was in the age of above 10 and under 15, the rate being 7·08 per 1,000. For those "above 60 and upwards" the mortality was at the rate of 76·73 per 1,000. The percentage on total deaths amongst infants under one year is 21·24 against 23·79 in 1884. For those above 1 and under 5 the percentage on total deaths is 21·04 against 21·28 in 1884. For old people above 60 and upwards the percentage on total deaths is 12·03 against 10·66 in 1884. The total deaths by sexes under the different ages in 1884 in each Collectorate are given in Annual Form IV. in the Appendix.

Deaths by caste or class.

20. The deaths by caste or class in each Collectorate are given in Annual Form No. V. in the Appendix. By the census of 1881, the Mahomedan population numbered 3,107,171 persons, amongst whom, in 1885, 69,352 deaths were recorded, against 61,389 in 1884, the death-rate per 1,000 being 22·33 against 19·76 in 1884. The Hindu population amounted to 13,128,587 persons, amongst whom 397,910 deaths, or 30·31 per 1,000 of population, were reported during 1885. In 1884 the total deaths among this race was 339,283, equal to a death-rate of 25·71 per 1,000. Amongst the Christian population, numbering 138,326 persons, 2,508 deaths were reported during the year against 2,572 in 1884, the death-rate being 18·13 against 18·59 per 1,000 in 1884. Under the heading "Other castes" are included all those not belonging to either of the above sects, who by the census of 1881 numbered 80,330 persons, amongst whom during 1885 there were 3,821 deaths against 5,165 in 1884, the death-rate being 47·57 against 64·30 in 1884. For Mahomedans the maximum rate (35·14 per 1,000) took place during the year in the Poona Collectorate and the minimum (10·54) in Thar and Párkar. In 1884 these results were 34·88 and 10·71, and they were reported as having occurred in the Collectorates of Kánara and Thar and Párkar. Amongst Hindus the maximum rate (38·72) in 1885 was in Broach Collectorate; this is almost the same as in the Upper Sind Frontier Collectorate, where the death-rate was 38·72 per 1,000, and the minimum (14·63) in Ratnágiri. In 1884 they occurred in the same Collectorates—Broach (35·19) and Ratnágiri (15·78). The maximnm death-rate during the year amongst Christians was 34·45, and was reported from Kaira Collectorate, and the minimum (2·34) from Hyderabad. In the Collectorate of Panch Mahás no deaths amongst Christians were reported in 1885.

Deaths by causes.

21. The subjoined table shows the deaths in 1885 arranged according to the specified causes laid down by the Government of India and contrasted with the results for 1884 and the mean of the preceding 10 years. The causes of deaths will be more particularly noticed in the next section:—

Causes of Deaths.	Mean for 10 years, 1875-84.		1884.		1885.	
	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.
Cholera	26,765	1·64	13,804	0·84	37,287	2·27
Small-pox	7,923	0·49	14,438	0·88	2,646	0·16
Fevers	272,712	16·71	276,989	16·83	314,237	19·10
Bowel-complaints ...	34,952	2·14	35,983	2·19	45,056	2·73
Injuries	6,384	0·39	5,570	0·34	5,577	0·34
Other causes ...	68,697	4·21	61,625	3·74	68,788	4·18
All causes ...	417,433	25·58	408,409	24·82	473,591	28·78

Deaths by months.

22. The monthly distribution of deaths in 1885 is shown in the following table contrasted with the deaths in 1884 and the mean for 10 years. As a rule, as might be expected from its containing a fewer number of days, February is the month in which the least number of deaths occur, and the maximum usually takes place in August; but

during 1885 the greatest number of deaths (50,348) took place in July and the least (30,842) in February. In 1884 the greatest number (42,175) was in November and the least (29,298) in June :—

Months.	Deaths from all Causes.					
	Mean for 10 years, 1875-84.	Ratio per 1,000 of Population.	1884	Ratio per 1,000 of Population.	1885.	Ratio per 1,000 of Population.
January	32,673	2·00	32,796	1·99	33,197	2·02
February	28,781	1·76	29,626	1·80	30,842	1·87
March	31,455	1·93	32,431	1·97	33,703	2·05
April	31,387	1·92	30,785	1·87	31,527	1·92
May	33,184	2·03	30,820	1·87	35,647	2·17
June	33,126	2·03	29,298	1·78	43,317	2·63
July	38,095	2·33	31,201	1·90	50,348	3·06
August	41,668	2·55	36,007	2·19	48,757	2·96
September... ...	37,874	2·32	35,507	2·16	42,946	2·61
October	36,175	2·22	39,330	2·39	45,542	2·77
November	37,525	2·30	42,175	2·56	40,507	2·46
December	35,490	2·18	38,433	2·34	37,268	2·26
Year ...	417,433	25·58	408,409	24·82	473,591	28·78

Number of circles.

23. The statistical returns are received from 221 rural and 55 town circles, from 7 cantonments in British and 9 in foreign territory. The aggregate population of the census of 1881 of the rural circles is 14,348,658, of the town circles 2,044,601, and of the cantonments in British territory 61,155, including Europeans and Eurasians and fighting men, or a total of 16,454,414 persons.

WESTERN REGISTRATION DISTRICT.

Collectorates.

1. Khándesh.
2. Násik.
3. Thána.
4. City of Bombay.
5. Kolába.

Khándesh.

24. The Collectorate of Khándesh is divided into 16 tálukás and 6 pethas forming 22 rural and 4 town (urban) circles. The number of towns and villages is 2,683, and it covers an area of 9,944 square miles. The population is 1,237,231, and the average density per square mile amounts to 124·42 persons. The recorded birth-rate in 1885 is in excess of that for 1884 in each registration circle, except in the tálukás of Páchora and its petha Bhadgaon, Sávda and its pethás Yával and Ráver, and Jámner ; the registration of births is fairly carried out in the tálukás of Dhulia, Amalner, and its petha Párola, Erandol, Chálisgaon, Sindkheda, Shirpur, Chopda and Jalgaon. In other tálukás and their pethás and in each of the towns in the Collectorate the registration of births is very much neglected, as the recorded birth-rate amongst them is far below the standard (40 per 1,000). In the tálukás of Dhulia and Sindkheda greater attention appears to have been paid to this subject than in 1884. The recorded birth-rates in these tálukás are 52·27 and 49·10 per 1,000 of population respectively against 42·97 and 40·16 in 1884. The recorded birth-rates in the tálukás of Erandol (42·53 per 1,000) and Jalgaon (40·30) are nearly the same as those for the previous year (42·04) and (40·06) respectively. The recorded birth-rate during the year 1885 amongst the rural registration circles was higher than the reported death-rate in each táluka and its petha. The most notable instance of high birth-rate over the death-rate is the táluka of Dhulia, in which the recorded birth-rate was 52·27 per 1,000 and the death-rate 30·95. In the tálukás of Amalner and its petha Párola the recorded birth-rate (48·31) was also much higher than the death-rate (31·20). Amongst the urban circles the town of Nandurbár shows a considerably lower birth-rate (18·13 per 1,000) than the death-

rate (40·63). The town of Chopda also gives a lower birth-rate (18·23) than the death-rate (23·61).

The total number of deaths from all causes in 1885 was 36,339; the death-rate 29·37 per 1,000 of population is higher than in 1884 (21·73), and the decennial mean of 26·09.

The maximum monthly mortality (4,406) took place in September and the minimum (2,041) in January.

Cholera commenced in April, attained its maximum intensity in July, and continued to prevail till the close of the year. There were 1,900 deaths recorded from this cause against 8 in 1884, and a decennial mean of 2,839. The death-rate being 1·54 per 1,000 against 0·01 in 1884 and a decennial mean of 2·55. Cholera was present in each táluka and its petha and in each town in the Collectorate. The highest death-rate (7·15 per 1,000) was recorded in Chálisgaon Táluka. The next highest (4·82 per 1,000), which is nearly the same as that of the town of Chopda (4·74), took place in the town of Nandurbár. Then comes the Amalner Táluka and its petha Párola, in which the recorded death-rate was 3·19 per 1,000. In other tálukás and their pethas and in the towns of Dhulia and Nasirábad the recorded death-rate was below 3·00 per 1,000. Deaths from small-pox took place in each month of the year, except October and November; but it caused only 48 deaths against 96 in 1884 and a decennial mean of 1,017, the death-rate being 0·04 per 1,000 against 0·08 in 1884 and a decennial mean of 0·91. There were 27,315 deaths attributed to fevers against 21,367 in 1884 and a decennial mean of 19,957. The death-rate (22·08 per 1,000) was accordingly higher than in 1884 (17·27) or in the decennial mean (17·95).

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka and town with that for 1884 and the zilla rate with that of 1884 and the mean of the previous 10 years:—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of Towns and Villages.	Births. Number for 1885.	Births. Ratio per 1,000 of Population for 1885.	Births. Ratio per 1,000 of Population in 1884.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1884.
Khándés.	Dhulia Rural Circle.	59,688	757·16	78·83	152	3,120	52·27	42·97	116	1·94	13	·22	1,294	21·69	340	5·69	12	·20	72	1·21	1,847	30·95	25·78
	Amalner „ ..	83,966	527·	159·85	225	4,299	48·31	43·40	284	3·19	19	·21	2,097	23·57	281	3·16	17	·19	78	0·88	2,776	31·20	22·50
	Párola Petha „ ..																						
	Erandol „ ..	90,872	460·	197·55	198	3,865	42·53	42·04	125	1·38	..	..	1,877	20·65	543	5·98	25	·28	83	0·91	2,653	29·20	22·57
	Páchora „ ..	100,051	535·	187·01	157	3,535	35·33	36·11	281	2·81	1	·01	2,343	23·42	324	3·24	19	·19	137	1·37	3,105	31·05	19·26
	Bhadgaon Petha „ ..																						
	Chálisgaon „ ..	59,031	504·	117·13	132	2,537	42·98	36·61	422	7·15	1	·02	1,478	25·04	250	4·23	14	·24	72	1·22	2,237	37·90	19·11
	Pimpalner „ ..	87,549	1,339·	65·38	236	3,000	34·27	28·19	121	1·38	8	·09	1,567	17·79	253	2·89	12	·14	23	0·26	1,974	22·55	20·23
	Nizamjur Petha „ ..																						
	Nandurbár „ ..	56,025	673·54	83·18	195	2,184	38·98	34·56	12	0·21	2	·04	1,307	23·33	100	1·78	5	·09	10	0·18	1,436	25·69	26·04
	Sáhánda „ ..	64,368	479·	134·38	161	2,005	31·15	29·25	27	0·42	..	..	1,313	20·40	410	6·37	12	·19	117	1·81	1,879	29·19	22·26
	Táloda „ ..	49,788	1,177·	42·30	258	1,368	27·48	21·29	9	0·18	..	..	657	13·20	171	3·43	15	·30	12	0·24	864	17·35	13·98
	Sindkheda „ ..	61,461	504·	121·95	140	3,018	49·10	40·16	84	1·37	3	·05	1,782	28·99	477	7·76	5	·08	67	1·09	2,418	39·34	28·78
	Shirpur „ ..	43,321	651·	66·55	99	1,865	43·05	36·45	10	0·23	..	..	977	22·55	235	5·42	11	·25	12	0·28	1,245	28·73	28·00
	Chopda „ ..	45,903	367·52	124·90	91	2,011	43·81	39·21	3	0·07	..	..	1,170	25·49	270	5·88	14	·30	2	0·04	1,459	31·78	24·86
	Sávda „ ..																						
	Yával Petha „ ..	141,745	553·	256·32	182	5,657	39·91	41·57	117	0·83	..	..	3,248	22·91	750	5·29	34	·24	115	0·81	4,264	30·08	19·26
	Ráver Petha „ ..																						
	Bhusával „ ..																						
	Edalabad Petha „ ..	96,160	671·	168·41	183	3,610	37·54	35·06	48	0·50	..	..	1,981	20·60	533	5·54	22	·23	63	0·66	2,647	27·53	20·45
	Jalgaon „ ..	59,283	317·33	186·52	87	2,389	40·30	40·06	33	0·56	..	..	1,244	20·98	344	5·80	12	·20	57	0·96	1,690	28·51	20·34
	Jámner „ ..	83,535	525·	159·11	158	3,046	36·46	40·76	58	0·69	1	·01	2,136	25·57	312	3·74	8	·10	141	1·68	2,656	31·79	24·37
	Dhulia Town Circle.	18,449	1·84	10,026·03	1	465	25·20	17·18	50	2·71	..	..	269	14·58	56	3·03	..	..	61	3·31	436	23·63	14·47
	Nandurbár „ ..	6,841	0·46	14,871·74	1	124	18·13	14·33	33	4·82	..	..	186	26·31	59	8·62	5	·73	1	0·15	278	40·63	21·49
	Chopda „ ..	13,932	0·48	29,025·	1	254	18·23	16·51	66	4·74	..	..	260	18·66	2	0·14	1	·07	..	..	329	23·61	13·49
	Nasirabad „ ..	10,243	0·17	60,252·94	1	243	23·72	16·01	1	0·10	..	..	145	14·15	..	..	..	..	..	..	146	14·25	16·50
	1885 ..	1,237,231	9,944·	124·43	2,683	48,596	39·28	..	1,900	1·54	48	·04	27,315	22·08	5,710	4·61	243	·19	1,125	·91	36,339	29·37	..
	1884 ..					45,170	36·51	..	8	·01	96	·08	21,367	17·27	4,336	3·50	280	·23	792	·64	26,879	21·73	..
	Mean for 10 years 1875 to 1884 ..					31,146	28·01	..	2,839	2·55	1,017	·91	19,957	17·95	3,985	3·58	296	·27	920	·83	29,014	26·09	..

N. B.—The births and deaths for pethas are included in those for their respective tálukás, as the population of them is not shown separately in the Census Report.

Amongst the rural registration circles the highest death-rate from all causes (39·34 per 1,000 against 28·78 in 1884) took place in Sindkheda Táluka, in which 84 deaths, or 1·37 per 1,000, were attributed to cholera. Small-pox caused only 3 deaths, or 0·05 per 1,000, whilst the death-rate from fevers (28·99) was the highest in the Collectorate. The death-rate from bowel-complaints (7·76) was the highest in the rural circles. From injuries the rate was 0·08 and from other causes 1·09 per 1,000.

The next highest death-rate from all causes (37·90 per 1,000 against 19·11 in 1884) occurred in Chálisgaon Táluka, in which 422 deaths were ascribed to cholera; the death-rate (7·15 per 1,000) was the highest in the Collectorate. Small-pox caused only one death, whilst the death-rate from fevers was 25·04 per 1,000. From bowel-complaints and injuries the rates were respectively 4·23 and 0·24 per 1,000. The death-rate from other causes was 1·22 per 1,000.

The lowest death-rate from all causes (17·35 per 1,000 against 13·96 in 1884) took place in Taloda Táluka, in which 9 deaths, or 0·18 per 1,000, were attributed to cholera. Small-pox caused no death, whilst the death-rate from fevers (13·20) was the lowest in the Collectorate. From bowel-complaints the rate was 3·43, and from injuries 0·30 per 1,000. The rate from other causes was 0·24 per 1,000.

The next lowest death-rate from all causes (22·55 per 1,000 against 20·23 in 1884) occurred in Pimpalner Táluka and its petha Nizámpur, in which cholera causes 121 deaths, or 1·38 per 1,000. From small-pox 8 deaths, or 0·09 per 1,000, were reported during the year, whilst the death-rate from fevers was 17·79. From bowel-complaints and injuries the rates were respectively 2·89 and 0·14 per 1,000, and from other causes 0·26.

Amongst the urban circles the highest death-rate from all causes (40·63 per 1,000 of population against 21·49 in 1884) took place in the town of Nandurbár, and is the highest in the Collectorate. From cholera there were reported 33 deaths, or 4·82 per 1,000, and from small-pox there were no deaths. The death-rate from fevers (26·31) was the second highest in the Collectorate. The death-rate from bowel-complaints (8·62 per 1,000) was the highest in the Collectorate. From injuries and other causes the rates were respectively 0·73 and 0·15; the former was the highest in the Collectorate.

The lowest death-rate from all causes (14·25 per 1,000 against 16·50 in 1884. occurred in the town of Nasirabad, and which is also the lowest in the Collectorate) Cholera caused only one death, and no death was reported from small-pox. From fevers the death-rate was 14·15 per 1,000. There were no deaths reported from bowel-complaints, injuries and other causes.

In the town of Dhulia the death-rate from all causes was 23·63 per 1,000 against 14·47 in 1884, and which is nearly the same as that in the town of Chopda (23·61 per 1,000 against 13·49 in 1884). There were 50 deaths, or 2·71 per 1,000, from cholera reported in the town of Dhulia, and 66, or 4·74 per 1,000, in the town of Chopda. No deaths from small-pox were recorded in either of these towns whilst the rates from fevers were respectively 14·58 and 18·66 per 1,000.

The death-rate from bowel-complaints (0·14 per 1,000) in the town of Chopda was the lowest in the Collectorate.

The registration of births in each of the four towns and the registration of deaths in them, except in the town of Nandurbár, are evidently much neglected.

The low birth and death-rates show that the registration of vital statistics is not properly attended to in Taloda Táluka.

In the following tálukás and towns much greater attention is required regarding the registration of births :—

Tálukás.

1. Páchora and its petha Bhadgaon.
2. Pimpalner and do. Nizámpur.
3. Nandurbár.
4. Sháháda.
5. Taloda.
6. Sávda and its pethas Yával and Ráver.
7. Bhusával and its petha Edalabad.

Towns.

1. Dhulia.	3. Chopda.
2. Nandurbár.	4. Nasirábad.

Násik.

25. The Collectorate of Násik is divided into 12 tálukás (rural circles), 2 towns (urban circles) and 2 cantonments. The number of towns and villages is 1,633 and its area covers 5,940 square miles. The population is 781,206, and the average density per square mile amounts to 131·51 persons. In 1885 the registration of births, as compared with 1884, in most of the rural circles shows marked improvement. In the tálukás of Násik, Igatpuri, Niphád, Yeola and Peint, the recorded birth-rate is below the standard (40 per 1,000). I must again remark on the defective state of registration of births in the towns of Násik and Yeola. The recorded birth-rate in the former amounts to only 15·89 per 1,000 against 17·59 in 1884 and in the latter 28·50 against 29·23. Such returns are discreditable to the Municipal Administration. Amongst the rural registration circles the recorded birth-rate is higher than the death-rate in all the tálukás, except the tálukás of Násik, Dindori, Niphád and Yeola. In the táluka of Dindori the birth-rate (41·75 per 1,000) was the same as the death-rate (41·07); but in the remaining three tálukas the birth-rate was below the death-rate. In the táluka of Peint the birth-rate (34·13 per 1,000) was considerably higher than the death-rate (18·60); neither can be accepted as correct. Amongst the urban circles, both the towns of "Násik and Yeola" record considerably lower birth-rates, 15·89 and 28·50 respectively, than the death-rates 50·62 and 41·96, and in the cantonments also the birth-rates were lower than the death-rates.

The total recorded mortality from all causes in 1885 was 29,281, or 34·47 per 1,000 of population, against 24·57 in 1884 and the decennial mean of 26·92.

The maximum monthly mortality (3,952) took place in August and the minimum (1,456) in January.

Cholera made its appearance in February, attained its maximum intensity in June, and continued to prevail till the close of the year. It caused during the year 2,737 deaths, or 3·50 per 1,000, against 76, or 0·10 in 1884, and a decennial mean of 1,220 or 1·62. Amongst the rural circles cholera was present in each táluka except Peint. The highest recorded death-rate (7·13 per 1,000) took place in Niphád Táluka. The next highest death-rates (6·11 and 5·90 per 1,000) were recorded in Násik and Yeola Tálukás respectively, whilst a death-rate of 3·54 was recorded in Dindori Táluka. In the remaining tálukas the death-rate was below 3·00 per 1,000. Amongst the urban circles the town of Násik represents the highest death-rate (16·39 per 1,000) in the Collectorate. But it must be remembered that the fixed population was largely augmented during the year by the Shimvast Fair; and that many of the deaths took place among non-residents. There were no deaths in the town of Yeola. In the cantonment of Málegaon the rate was 5·29 per 1,000. No death took place in the cantonment of Devláli. Small-pox prevailed to a slight extent in each month till October, and caused 81 deaths, or 0·10 per 1,000, against 599, or 0·77, in 1884 and a decennial mean of 557 or 0·74. There were 20,178 deaths ascribed to fevers against 14,484 in 1884 and a decennial mean of 14,506. The death-rate (25·83 per 1,000) was higher than in 1884 (18·54) and the decennial mean (19·26).

The following statement shows the number of recorded births and deaths by causes and their ratios per 1,000 in each táluka, town and cantonment in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka, town and cantonment with that for 1884 and the zilla rate with that of 1884 and the means of the previous 10 years:—

Collectorate.	† Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile	Number of Towns and Villages.	Births. Number for 1885.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1884.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1884.
Násik.	Násik Rural Circle ..	67,910	464·44	146·22	135	2,406	35·43	28·07	415	6·11	4	·06	1,792	26·39	267	3·93	14	·21	375	4·84	2,807	41·34	25·19
	Sinnar „ ..	86,081	519·	127·32	99	2,927	44·29	44·11	156	2·36	9	·14	1,982	29·99	336	5·08	5	·08	386	5·84	2,874	43·49	29·63
	Igatpuri „ ..	68,749	376·	182·84	128	2,128	30·95	26·69	102	1·48	49	·71	1,362	19·81	147	2·14	11	·16	213	3·10	1,884	27·40	29·48
	Dindori „ ..	72,990	529·	136·54	123	3,018	41·75	34·57	256	3·54	..	..	1,809	25·02	510	7·05	13	·18	381	5·27	2,969	41·07	25·91
	Niphád „ ..	87,523	411·	212·95	121	3,198	36·54	30·57	624	7·13	..	..	2,358	26·94	526	6·01	20	·23	386	4·41	3,914	44·72	24·82
	Chándor „ ..	50,899	385·	132·21	108	2,040	40·08	34·09	77	1·51	1	·02	1,518	29·82	202	3·97	6	·12	114	2·24	1,918	37·68	22·50
	Yeola „ ..	35,597	411·78	86·45	117	1,350	37·92	32·46	210	5·90	..	..	1,133	31·83	184	5·17	4	·11	107	3·01	1,638	46·02	22·87
	Nándgaon „ ..	30,399	437·	69·56	83	1,606	49·54	46·61	65	2·14	..	..	1,156	37·37	145	4·77	3	·10	55	1·15	1,384	45·53	27·50
	Málegaon „ ..	74,718	775·	96·41	144	3,223	43·27	37·59	139	1·86	6	·08	2,064	27·62	203	2·71	14	·19	56	0·75	2,482	33·22	22·35
	Bágán „ ..	64,875	612·	104·81	155	2,835	43·70	37·23	140	2·16	11	·17	1,620	24·97	386	5·95	16	·25	45	0·69	2,218	34·19	24·18
	Kalvan „ ..	58,486	554·	105·57	187	2,355	40·27	36·58	138	2·36	..	..	1,396	23·87	277	4·74	10	·17	134	2·29	1,955	33·43	25·25
	Peint „ ..	55,144	458·	120·40	221	1,882	34·13	28·96	..	..	..	..	975	17·68	15	0·27	17	·31	19	0·34	1,026	18·60	19·02
	Násik Town Circle.	24,101	0·56	43,037·50	1	385	15·89	17·09	395	16·39	1	·04	481	19·96	77	3·19	10	·41	250	10·62	1,220	50·62	34·43
	Yeola „ ..	17,685	0.22	80,386·36	1	504	28·50	29·23	..	..	..	..	409	23·13	60	3·39	12	·68	261	14·76	742	41·96	31·04
	Devlálí Cantonment	1,086	*	..	..	40	36·83	33·15	..	..	..	..	27	24·86	3	2·76	1	·92	21	19·34	52	47·88	23·94
	Málegaon „ ..	3,780	*	..	..	142	37·57	32·80	20	5·29	..	..	116	30·69	26	6·88	2	·53	34	8·99	198	52·38	28·30
	Europeans and Eurasians and fighting men in the Cantonment of Devlálí	1,886																					
	1885	781,206	5040·	131·51	1,633	29,947	38·33	..	2,737	3·50	81	·10	20,178	25·83	3,364	4·31	158	·20	2,763	3.54	29,281	37·47	..
	1884 ..					26,263	23·62	..	76	·10	599	·77	14,484	18·54	1,935	2·48	125	·16	1,972	2·52	19,194	24·57	..
	Mean for 10 years, 1875—1884 ..					21,677	28,78	..	1,220	1·62	557	·74	14,506	19·26	1,750	2·32	164	·22	2,076	2·76	20,273	26·92	..

* *N.B.*—The area in square miles of the cantonments of Devlálí and Málegaon are included in the towns of Násik and Málegaon respectively, as they are not separately shown in the Census report.

Amongst the rural registration circles the highest death-rate from all causes (46·02 per 1,000 against 22·87 in 1884) took place in the táluka of Yeola, in which cholera carried off 210 persons, the death-rate being 5·90 per 1,000. Small-pox caused no death, whilst the death-rate from fevers was 31·83 per 1,000. From bowel-complaints the rate was 5·17 and from injuries 0·11. The death-rate from other causes was 3·01 per 1,000.

The next highest death-rate from all causes (45·53 per 1,000 against 27·50 in 1884) occurred in Nándgaon Táluka. in which 65 deaths or 2·14 per 1,000 from cholera were recorded. From small-pox there were no deaths, whilst the death-rate from fevers (37·37 per 1,000) was the highest in the Collectorate. From bowel-complaints the death-rate was 4·77, and from injuries 0·10 per 1,000. The rate from other causes was 1·15 per 1,000.

The highest death-rate from bowel-complaints (7·05 per 1,000) in the Collectorate took place in the táluka of Dindori.

The lowest death-rate from all causes (18·60 per 1,000 against 19·02 in 1884) took place in Peint Táluka, in which no deaths were recorded either from cholera or small-pox. The recorded death-rate from fevers (17·68 per 1,000) was the lowest in the Collectorate. The death-rate from bowel-complaints (0·27 per 1,000) was the lowest in the Collectorate. From injuries the death-rate (0·31 per 1,000) was the highest in the rural circles, and from other causes the death-rate (0·34) was the lowest in the Collectorate.

The next lowest death-rate from all causes (27·40 per 1,000 against 20·46 in 1884) occurred in Igatpuri Táluka, in which cholera caused 102 deaths. The death-rate (1·48 per 1,000) was the lowest in the Collectorate. Small-pox caused 49 deaths, and the death-rate (0·71 per 1,000) was the highest in the Collectorate. From fevers the death-rate (19·81 per 1,000) was the next lowest in the Collectorate. From bowel-complaints and injuries the respective rates were 2·14 and 0·16 per 1,000 and from other causes 3·10.

In the urban circles, the highest death-rate from all causes (50·62 per 1,000 against 34·43 in 1884) was reported in the town of Násik, in which 395 deaths were recorded from cholera. Small-pox caused only 1 death, whilst the death-rate from fevers was 19·96 per 1,000. From bowel-complaints the death-rate was 3·19 per 1,000 and from injuries 0·41. The death-rate from other causes (10·62 per 1,000) was exceptionally high.

At the town of Yeola the reported death-rate from all causes was 41·96 per 1,000 against 31·04 in 1884, in which no deaths either from cholera or small-pox were recorded. The death-rate from fevers was 23·13 per 1,000 and from bowel-complaints 3·39. The death-rates from injuries and other causes were respectively 0·68 and 14·76 per 1,000.

Among the cantonments, the death-rate from all causes (47·88 per 1,000 against 23·94 in 1884) took place at Devláli. There were no deaths recorded either from cholera or small-pox, whilst the death-rate from fevers was 24·86 per 1,000. The recorded death-rates from bowel-complaints and injuries were respectively 2·76 and 0·92 per 1,000, and from other causes 19·34.

The highest death-rate from all causes (52·38 per 1,000 against 28·30 in 1884) in the Collectorate was recorded at Malegaon Cantonment, in which cholera caused 20 deaths, or 5·29 per 1,000. The death-rate from fevers was 30·69 per 1,000 and from bowel-complaints 6·88. From injuries and other causes the rates were respectively 0·53 and 8·99 per 1,000.

The registration of births in the towns of Násik and Yeola is manifestly inaccurate, and it would be well if stricter attention were paid to this matter.

Efforts should also be specially made to improve the registration of vital statistics in Peint Táluka.

Thána.

26. The Collectorate of Thána is divided into 10 tálukás and 2 towns. It contains 1,882 towns and villages, and covers an area of 3,936 square miles. The population is 807,367, and the average density per square mile amounts to 205·12 persons. In 1885 the registration of births appears to have been much neglected, as the birth-rate in each táluka and town is much below the standard (40 per 1,000), and for the most part is much below the birth-rate recorded in 1884. In the rural registration circles the recorded birth-rate per 1,000 of population in 1885 was higher than the death-rate in the tálukás of Dáhánu, Máhím, Sháhápur, Murbád, Bassein and Karjat; and in other tálukás the recorded death-rate was higher than the birth-rate. In Kalyán the recorded birth-rate was 29·21 per 1,000 and the death-rate 39·55, and in Bhiwandi the birth-rate was 29·99 and the death-rate 37·63. In the town of Thána the birth-rate 11·41 and in Kalyán 15·41 with their respective death-rates (32·10 and 31·06) show how utterly this important subject is neglected by the Municipal Commissioners in each town. Their attention was called to this subject in the last annual report.

The number of deaths from all causes in 1885 was 21,736, the recorded death-rate being 26·92 per 1,000 of population, against 24·33 in 1884 and a decennial mean of 22·83.

The maximum monthly mortality (2,689) took place in January and the minimum (1,323) in April.

Cholera was present at the close of 1884, and in 1885 the maximum intensity was in June. It disappeared in December after causing 2,589 deaths, or 3·21 per 1,000, against 558 or 0·69 in 1884. The decennial mean was 1,397, or 1·80 per 1,000. Cholera appeared in each táluka and town in the Collectorate. The highest death-rate (7·70 per 1,000) took place amongst the rural circles in Kalyán Táluka. The next highest death-rate (6·95) occurred in Bhiwandi Táluka. In Karjat and Wáda tálukás the death-rates were respectively 3·72 and 3·62 per 1,000. In other tálukás the rate was below 3·00 per 1,000. Amongst the town circles the highest death-rate (12·08) in the Collectorate occurred in the town of Kalyán, and the next highest in the Collectorate was in the town of Thána

(9·13 per 1,000). Small-pox prevailed in the Collectorate throughout the year, except November, and caused 101 deaths, against 524 in 1884 and a decennial mean of 452. The death-rate being 0·13 per 1,000 of population, against 0·65 in 1884 and a decennial mean of 0·58. The deaths from fevers amounted to 16,150, or 20·00 per 1,000, against 15,845 or 19·63 in 1884. The mean of 10 years was 13,488 or 17·36.

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka and town with that for 1884, and the zilla rate with that of 1884 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of Towns and Villages.	Births.			Deaths.														Ratio of Deaths from all Causes per 1,000 of Population in 1884.
						Number for 1885.	Ratio per 1,000 of Population.	Ratio per 1,000 of Population in 1884.	Cholera.		Small-fox.		Fevers.		Bowel-complaints.		Injuries.		Other Causes.		All Causes.		
									Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	
Thána.	Dáhánu Rural Circle	109,322	643·	170·02	209	3,196	29·23	30·42	30	0·27	7	·06	1,691	15·47	42	0·38	73	·67	145	1·33	1,988	18·18	20·75
	Máhim " ..	77,360	419·	184·63	186	2,023	26·15	28·67	110	1·42	..	..	1,193	15·42	12	0·16	49	·63	76	0·98	1,440	18·61	18·87
	Váda " ..	36,493	310·	117·72	153	1,138	31·18	36·45	132	3·62	2	·06	954	26·14	13	0·36	14	·38	87	2·38	1,202	32·94	32·85
	Sháhápur " ..	107,729	870·	123·83	273	3,355	31·14	30·38	245	2·27	34	·32	2,265	21·02	16	0·15	47	·44	148	1·38	2,756	25·58	23·02
	Murbád " ..	63,934	351·	182·15	171	1,936	30·28	32·36	189	2·91	25	·39	1,386	21·68	28	0·44	21	·33	169	2·64	1,815	28·39	24·62
	Kalyán " ..	65,978	275·50	239·42	222	1,901	29·21	36·71	501	7·70	7	·11	1,621	24·91	59	0·91	23	·35	383	5·57	2,574	39·55	32·59
	Bhiwndi " ..	75,363	250·	301·45	194	2,260	28·96	35·36	524	6·95	8	·11	2,067	27·43	78	1·04	20	·26	139	1·84	2,836	37·63	31·66
	Rassein " ..	68,067	221·	312·07	92	1,584	22·97	24·20	110	1·59	..	..	1,167	16·92	19	0·28	26	·38	132	1·91	1,454	21·08	20·41
	Sálsette " ..	35,638	224·02	400·38	112	2,388	24·42	25·62	158	1·69	5	·05	1,671	17·83	193	2·11	49	·52	302	3·20	2,443	26·07	21·26
	Karjat " ..	82,092	353·	232·47	268	2,515	30·05	35·38	305	3·72	13	·16	1,727	21·04	52	0·63	39	·47	227	2·77	2,683	28·78	27·06
	Thána Town Circle.	14,456	6·98	2,071·06	1	165	11·41	15·98	132	9·13	..	..	246	17·02	30	2·08	10	·69	46	3·18	464	32·10	22·00
	Kalyán " ..	12,910	2·50	51·64	1	199	15·41	13·32	156	12·08	..	..	162	12·55	1	0·08	6	·47	76	5·88	401	31·06	21·30
	1885 ..	807,367	3,936·	205·12	1,882	22,559	27·94	..	2,589	3·21	101	·13	16,150	20·00	548	0·68	377	·47	1,971	2·44	21,736	26·92	..
	1884 ..					24,644	30·52	..	558	·69	524	·65	15,845	19·63	273	0·34	363	·45	2,079	2·57	19,642	24·33	..
	Mean for 10 years, 1875—1884 ..					19,560	25·18	..	1,397	1·80	452	·58	13,488	17·36	272	0·35	390	·50	1,742	2·24	17,741	22·83	..

Amongst the rural registration circles the highest recorded death-rate from all causes (39·55 per 1,000 against 32·99 in 1884), which is also the highest in the Collectorate, took place in the táluka of Kalyán, in which cholera carried off 501 persons, or 7·70 per 1,000, which is the highest rate among the rural circles. Small-pox caused only 7 deaths, the recorded death-rate being 0·11 per 1,000. The death-rate from fevers was 24·91 per 1,000, whilst that from bowel-complaints was 0·91. From injuries the death-rate was 0·35, whilst that from other causes (5·57) was the highest in the rural circles.

The next highest death-rate from all causes (37·63 per 1,000 against 31·66 in 1884) is found in Bhiwndi Táluka, in which 524 deaths, or 6·95 per 1,000, were recorded from cholera. There were only 8 deaths from small-pox, whilst from fevers 2,067 deaths were recorded. The death-rate (27·43) from fevers was the highest in the Collectorate. From bowel-complaints and injuries the rates were respectively 1·04 and 0·26 per 1,000 and from other causes 1·84.

Amongst the rural circles and in the Collectorate the highest death-rate from bowel-complaints (2·11 per 1,000) took place in Sálsette Táluka.

The lowest death-rate from all causes (18·18 per 1,000 of population against 20·73 in 1884), which is nearly the same as that of Máhím Táluka (18·61 against 18·87 in 1884) and which is also the lowest in the Collectorate, took place in Dáhánu Táluka, in which 30 deaths were recorded from cholera; the death-rate (0·27) was the lowest in the Collectorate. Small-pox caused 7 deaths, or 0·06 per 1,000, whilst the death-rate from fevers was 15·47. From bowel-complaints and injuries the rates were respectively 0·38 and 0·67, and from other causes 1·33 per 1,000.

In Máhím Táluka cholera caused 110 deaths, or 1·42 per 1,000 of population. No deaths were recorded from small-pox, whilst the death-rate (15·42 per 1,000) from fevers was the lowest in the rural circles. From bowel-complaints and injuries the respective death-rates were 0·16 and 0·63 per 1,000, and from other causes 0·98 per 1,000, which is the lowest in the Collectorate.

In the towns of Thána and Kalyán the reported death-rates from all causes were 32·10 and 31·06 respectively, against 22·00 and 21·30 per 1,000 in 1884. One hundred and thirty-two deaths from cholera were recorded in the former and 156 in the latter. The death-rate (12·08 per 1,000) from cholera in the town of Kalyán is the highest in the Collectorate. From small-pox there was no death recorded in either of these towns. The recorded death-rate from fevers in Thána was 17·02 per 1,000 and in Kalyán 12·55, which is the lowest in the Collectorate. The death-rate from bowel-complaints (2·08 per 1,000) in Thána is the highest in the town circles, and that (0·08 per 1,000) in Kalyán is the lowest in the Collectorate. From injuries the death-rates were respectively 0·69 and 0·47 per 1,000, and from other causes 3·18 and 5·88 per 1,000.

In the tálukás of Máhím, Bassein and Sálsette the registration of births is not properly attended to, and the recorded death-rate in these tálukás cannot be accepted as correct.

The registration of vital statistics in this Collectorate stands in need of much improvement, and I respectfully hope that Government may be pleased to issue such orders as will ensure greater attention being paid to it both in the towns and in the rural circles.

Bombay.

27. The city of Bombay covers an area of 22 square miles, and the total population according to census of 1881 is 773,196. The average density per square mile amounts to 35,145·27 persons. The number of recorded deaths from all causes in 1885 was 21,561, the death-rate being 27·89 per 1,000, against 28·82 in 1884 and a decennial mean of 32·94.

The maximum monthly mortality (2,040) took place in March and the minimum (1,576) in November.

Cholera was present at the end of 1884, and in 1885 attained its maximum intensity in March, but continued to prevail more or less throughout the year. Five hundred and eighty-one deaths, or 0·75 per 1,000, were ascribed to it, against 568 or 0·73 in 1884 and a decennial mean of 754 or 1·08. Small-pox caused only 61 deaths, or 0·08 per 1,000, against 112 or 0·14 in 1884 and a decennial mean of 705 or 1·01. The death-rate from fevers (8·38 per 1,000) was below the mean of 10 years (10·63) and slightly lower than in 1884 (8·80). From bowel-complaints the death-rate was 1·97 per 1,000 against 2·16 in 1884 and a decennial mean of 3·15. The death-rate from injuries (0·39) was the same as in the previous year (0·39), but lower than the mean of 10 years (0·47 per 1,000). From other causes the death-rate was 16·32 per 1,000 against 16·60 in 1884 and a decennial mean of 16·60.

The following table shows the number of deaths by causes and their ratios per 1,000 of population, and compares the death-rate with that of 1884 and the mean of the previous 10 years :—

Years.	Population according to Census of 1881.	Cholera.		Small-pox.		Fevers.		Bowel-complaints.		Injuries.		Other Causes.		All Causes.	
		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
1885	773,196	581	·75	61	·08	6,479	8·38	1,520	1·97	305	·39	12,615	16·32	21,561	27·89
1884		568	·73	112	·14	6,801	8·80	1,672	2·16	302	·39	12,832	16·60	22,287	28·82
Mean of 10 years, 1875—1884.. ..		754	1·08	705	1·01	7,395	10·63	2,194	3·15	328	·47	11,549	16·60	22,925	32·94

Kolába.

28. The Collectorate of Kolába is divided into 6 tálukás and 1 petha forming 7 rural circles and 3 town circles. It contains 1,194 towns and villages, and covers an area of 1,811 square miles. The population is 482,830, and the average density per square mile amounts to 266·61 persons. The registration of births appears to be much behind hand, as the birth-rate in each táluka and town is far below the standard (40 per 1,000). Amongst the rural circles the recorded birth-rate in 1885 is slightly in excess of that for 1884 in the tálukás of Pen and its petha Nágotna, Roha and Mahád. In Panvel and A'líbág tálukás the recorded birth-rate is nearly the same as that for 1884. In the former it was 33·90 per 1,000 against 33·17 in 1884 and in the latter 33·01 against 33·97. But in Mángaon Táluka it was 25·78 against 28·11 in 1884. Amongst the town circles the recorded birth-rates (28·39 and 23·37 per 1,000) in the towns of A'líbág and Mahád respectively are higher than 1884 (25·41 and 19·69). In the town of Panvel the recorded birth-rate (13·91 per 1,000) is much below that for 1884 (17·29). The registration of births is very much neglected in the táluka of Mahád and the town of Panvel. The recorded birth-rate in each táluka and town is higher than the recorded death-rate. In Mahád Táluka and in the town of Penvel, owing to the defective registration of vital statistics, a birth-rate 16·20 per 1,000 for the former and 13·91 for the latter was recorded, and a death-rate of 11·85 per 1,000 and 11·49 respectively.

The number of deaths from all causes was 10,472, the death-rate being 21·69 per 1,000 of population against 21·83 in 1884 and a decennial mean of 20·32.

The maximum monthly mortality (1,120) took place in June and the minimum (681) in April.

Cholera was present at the close of 1884, and in 1885 attained its maximum intensity in June. It disappeared in September, but re-appeared in December; 975 deaths were ascribed to it against 627 in 1884 and a decennial mean of 835. The death-rate being 2·02 per 1,000 against 1·30 in 1884 and a decennial mean of 1·82. Amongst the rural circles the cholera prevailed more or less in each táluka, except Mahád, and amongst the town circles the town of Panvel is only affected by it. The Mahád Táluka and the towns of A'líbág and Mahád were totally free from it, and no deaths from this disease took place amongst them. The highest death-rate (5·30 per 1,000) from cholera took place in Mángaon Táluka. The next highest (4·35 per 1,000) was in the town of Panvel. Then comes the táluka of Panvel, in which the death-rate was 3·28 per 1,000. In Pen Táluka and its petha Nágotna the rate was 1·47 per 1,000 and in Roha Táluka 1·02. The death-rate (0·76 per 1,000) in A'líbág Táluka was the lowest in the Collectorate. Small-pox prevailed throughout the year, and caused 188 deaths, or 0·39 per 1,000, against 283 or 0·59 in 1884 and a decennial mean of 214 or 0·47. The deaths from fevers were 7,292 against 7,607 in 1884 and a decennial mean of 6,424; the death-rate (15·10 per 1,000) was nearly the same as that for 1884 (15·76), but slightly above the decennial mean (14·03).

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka and town with that for 1884 and the zilla rate with that of 1884 and the mean of the previous 10 years:—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of Towns and Villages.	Births. Number in 1885.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1884.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1884.
Kolába.	Panvel Rural Circle ..	90,830	304	298·78	218	3,079	33·90	33·17	298	3·28	12	0·13	1,942	21·38	44	0·48	27	0·30	216	2·38	2,539	27·95	26·71
	A'líbág ,, ..	69,762	193·40	360·61	171	2,303	33·01	33·97	53	0·76	25	0·36	1,188	17·03	59	0·84	36	0·52	405	5·80	1,766	25·31	25·51
	Pen ,, ..	70,200	298	235·57	199	2,318	33·02	31·22	103	1·47	10	0·14	1,266	18·03	26	0·37	22	0·31	176	2·51	1,603	22·83	23·61
	Nágotna Petha ,, ..																						
	Roha ,, ..	44,835	*200	224·18	133	1,547	34·50	32·74	46	1·02	60	1·34	734	16·37	42	0·94	15	0·34	162	3·61	1,059	23·62	24·25
	Mángaon ,, ..	81,085	353	229·70	225	2,090	25·78	28·11	430	5·30	52	0·64	1,070	13·20	96	1·18	38	0·47	205	2·53	1,891	23·32	24·65
	Mahád ,, ..	102,587	458·57	223·71	243	1,662	16·20	14·90	..	..	23	0·27	903	8·80	49	0·48	19	0·19	217	2·11	1,216	11·85	12·09
	Panvel Town Circle ..	10,351	3	3,450·33	1	144	13·91	17·29	45	4·35	..	..	38	3·67	8	0·77	3	0·29	25	2·41	119	11·49	6·47
	A'líbág ,, ..	6,376	0·60	10,626·67	1	181	28·39	25·41	..	..	..	..	75	11·76	..	..	..	..	78	12·23	153	23·99	19·45
	Mahád ,, ..	6,804	0·43	15,823·26	1	159	23·37	19·69	..	..	1	0·15	76	11·17	9	1·32	3	0·44	37	5·44	126	18·52	23·52
	1885 ..	482,830	1,811	266·61	1,194	13,483	27·92	..	975	2·02	183	0·39	7,292	15·10	333	0·69	163	0·34	1,521	3·15	10,472	21·69	.
	1884 ..					13,328	27·60	..	627	1·30	233	0·59	7,607	15·76	325	0·67	156	0·32	1,542	3·19	10,540	21·83	..
	Mean for 10 years, 1876—1884 ..					10,119	22·10	..	835	1·82	214	0·47	6,424	14·03	222	0·48	165	0·36	1,446	3·16	9,306	20·22	..

N. B.—The births and deaths in Nágotna Petha are included in Pen Táluka, as in the Census report the population living in each is not shown separately. The statistics of Panvel Táluka and town are included in this Collectorate for mean.

Amongst the rural circles and in the Collectorate the highest death-rate from all causes (27·95 per 1,000 against 26·71 in 1884) took place in Panvel Táluka, in which 298 deaths, or 3·28 per 1,000, were attributed to cholera. Small-pox caused 12 deaths; the death-rate (0·13 per 1,000) was the lowest in the Collectorate. The death-rate from fevers (21·38 per 1,000) was the highest in the Collectorate. From bowel-complaints and injuries the death-rates were respectively 0·48 and 0·30 per 1,000 of population, and from other causes the rate was 2·38.

The next highest death-rate from all causes (25·31 per 1,000 against 25·51 in 1884) occurred in A'líbág Táluka, in which 53 deaths were ascribed to cholera; the death-rate (0·76 per 1,000) was the lowest in the Collectorate. Small-pox caused 25 deaths, or 0·36 per 1,000, whilst the death-rate from fevers was 17·03. From bowel-complaints the death-rate was 0·84 and from injuries 0·52 per 1,000. The death-rate from other causes (5·80 per 1,000) was the highest in the rural circles.

Amongst the rural circles the highest death-rate from bowel-complaints (1·18 per 1,000), and in the Collectorate the highest death-rate from cholera (5·30 per 1,000) took place in Mángaon Táluka.

The lowest recorded death-rate from all causes (11·85 per 1,000 against 12·09 in 1884) took place in Mahád Táluka, in which no death from cholera was recorded. Small-pox caused 28 deaths, or 0·27 per 1,000, whilst the death-rate from fevers (8·80 per 1,000) was the lowest in the rural circles. From bowel-complaints the death-rate was 0·48. The death-rate from injuries (0·19 per 1,000), was the lowest in the Collectorate, and from other causes (2·11) was also the lowest in the Collectorate.

Amongst the urban circles the highest death-rate from all causes (23·99 per 1,000 against 19·45 in 1884) took place in the town of A'líbág, in which no deaths from cholera and small-pox were recorded. The death-rate from fevers was 11·76 per 1,000. There were no deaths reported from bowel-complaints and injuries, whilst the death-rate from other causes (12·23 per 1,000) was the highest in the Collectorate.

The lowest death-rate from all causes (11·49 per 1,000 against 6·47 in 1884), and which was also the lowest in the Collectorate, took place in the town of Panvel, in which cholera caused 45 deaths; the death-rate (4·35 per 1,000) was the next highest in the Collectorate. Small-pox caused no death, whilst the death-

rate from fevers (3·67 per 1,000) was the lowest in the Collectorate. From bowel-complaints the rate was 0·77 and from injuries 0·29 per 1,000. The death-rate from other causes was 2·41.

In the town of Mahád the death-rate from all causes was 18·52 per 1,000. There were no deaths registered from cholera. Small-pox caused only 1 death, whilst the death-rate from fevers was 11·17 per 1,000. From bowel-complaints the rate was 1·32 and from injuries 0·44. The rate from other causes was 5·44 per 1,000.

The registration of vital statistics in Mahád Táluka is much neglected, and the result is untrustworthy.

The registration of vital statistics in each of the town circles is also much neglected, and the value of our statistical returns is thus seriously impaired.

The registration of vital statistics in the Kolába Collectorate is evidently in need of great improvement, as was noticed in last year.

CENTRAL REGISTRATION DISTRICT.

Collectorates.

1. Ahmednagar.
2. Poona.
3. Sholápur.
4. Sátára.
5. Ratnágiri.

Ahmednagar.

29. The Collectorate of Ahmednagar is divided into 11 rural, 2 town and 1 cantonment circle. It contains 1,334 towns and villages, and covers an area of 6,666 square miles. The population is 751,228, and the average density per square mile amounts to 112·69 persons. In 1885 the registration of births throughout the Collectorate seems to have been well attended to, except in the town and cantonment of Ahmednagar, in which the recorded birth-rate is much below the standard (40 per 1,000). Amongst the rural circles the birth-rate recorded in 1885 is higher in all the tálukás than that recorded in 1884. The most notable instances are found in Jámkhed, in which the recorded birth-rate is 50·05 per 1,000 against 46·34 in 1884, in Karjat 50·34 against 46·09, and in Sangamner 51·33 against 46·29. In the town of Sangamner the recorded birth-rate (49·23 per 1,000) is higher than that (45·13 per 1,000) recorded in 1884; but at Ahmednagar the recorded birth-rate was only 28·87 against 32·80 per 1,000 in 1884. With the exception of the town and cantonment of Ahmednagar, in which the recorded birth-rate is below the death-rate, the birth-rate in each registration circle in the Collectorate is higher than the death-rate. It is, therefore, evident that the Municipality at Ahmednagar has not paid sufficient attention to this subject.

The number of deaths from all causes in 1885 was 25,633, the death-rate being 34·12 per 1,000, against 25·49 in 1884 and a decennial mean of 28·50.

The maximum monthly mortality (3,432) took place in August and the minimum (1,267) in February.

Cholera commenced in March, attained its maximum intensity in July, and disappeared in December after causing 1,132 deaths, or 1·51 per 1,000 of population, against 24 or 0·03 in 1884 and a decennial mean of 2,149 or 2·81. Cholera prevailed more or less in each táluka and town in this Collectorate. The highest death-rates (3·52 and 3·29 per 1,000) took place in the town of Sangamner and in the táluka of Shevgaon respectively. In other tálukás, town and cantonment, the rate was below 3·00 per 1,000. Small-pox prevailed to a very slight extent and caused 33 deaths against 50 in 1884 and a decennial mean of 280. The death-rate being 0·05 per 1,000 against 0·07 in 1884 and a decennial mean of 0·37. The death-rate from fevers (24·36) per 1,000 was above the decennial mean (18·74) and for 1884 (19·07).

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each táluka, town and cantonment in the Collectorate,

and compares the birth-rate and the death-rate from all causes in each táluka, town and cantonment with that for 1884 and the zilla rate with that of 1884 and the mean of the previous 10 years:—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of towns and villages.	Births.			Deaths.																		Ratio of Deaths from all Causes per 1,000 of Population in 1884.
									Cholera.		Small-pox.		Fevers.		Bowel-complaints.		Injuries.		Other Causes.		All Causes.		
						Number for 1885.	Ratio per 1,000 of Population.	Ratio per 1,000 of Population in 1884.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	
Ahmednagar.	Nagar Rural Circle ..	71,458	618·50	115·53	108	3,099	43·37	42·00	10	0·14	..	..	1,458	20·40	306	4·28	12	·17	253	3·54	2,039	28·53	27·87
	Akola " ..	60,800	588·	103·40	156	2,493	41·00	36·27	4	0·07	2	0·03	1,430	23·52	135	2·22	8	·13	270	4·44	1,849	30·41	26·91
	Jámkhed " ..	60,960	482·	126·47	75	3,051	50·05	46·34	168	2·77	..	..	1,992	32·68	246	4·02	6	·10	67	1·10	2,479	40·67	24·52
	Párner " ..	73,701	779·	94·61	122	3,019	40·96	39·40	76	1·03	..	..	1,782	24·18	175	2·37	26	·35	344	4·67	2,403	32·60	27·91
	Shrigonda " ..	51,291	625·	82·06	84	2,011	39·21	35·83	14	0·27	1	0·02	1,266	24·68	106	2·07	5	·10	163	3·22	1,557	30·36	26·63
	Karjat " ..	34,339	558·	60·03	78	1,753	50·34	46·00	25	0·72	2	0·06	1,059	30·41	155	4·45	6	·17	150	4·31	1,397	40·12	27·57
	Nevása " ..	73,158	607·	123·76	145	3,372	43·14	40·38	232	2·97	8	0·10	1,739	22·25	261	3·34	15	·19	470	6·01	2,725	34·86	22·93
	Kopergaon " ..	63,789	511·	124·83	121	2,738	42·92	40·46	116	1·82	1	0·02	1,870	29·31	249	3·90	7	·11	135	2·12	2,378	37·28	27·75
	Sangamner " ..	59,661	707·41	84·20	151	3,057	51·33	46·29	91	1·53	..	..	1,485	24·93	165	2·77	10	·17	548	9·20	2,299	38·60	24·59
	Ráhuri " ..	63,289	497·	127·34	111	2,761	43·62	42·33	56	0·88	13	0·20	1,653	26·12	121	1·91	7	·11	75	1·18	1,926	30·41	23·32
	Shevgaon " ..	37,113	670·	130·02	183	3,631	41·68	39·36	237	3·29	..	..	2,036	23·25	446	5·12	5	·06	261	3·23	3,045	34·95	19·20
	Ahmednagar Town Circle ..	22,003	0·50	658·06	1	950	28·87	22·80	17	0·52	2	0·06	374	10·15	77	2·34	7	·21	594	18·05	1,031	31·33	33·97
	Sangamner " ..	8,796	0·59	14,908·47	1	433	49·23	45·13	31	3·52	4	0·45	193	21·94	23	2·62	5	·57	158	17·96	414	47·06	22·40
	Ahmednagar Cantonment ..	4,589	..	..	..	76	16·56	17·21	5	1·09	..	..	17	3·70	4	0·87	..	..	69	14·38	92	20·05	16·34
	1885 ..	751,228	6,666	112·69	1,334	32,444	43·19	..	1,132	1·51	33	0·05	18,304	24·36	2,469	3·28	119	·16	3,676	4·76	25,633	34·12	..
	1884 ..					30,536	40·65	..	24	0·03	50	0·07	14,327	19·07	1,903	2·53	146	·20	2,699	3·59	19,149	25·49	..
	Mean for 10 years, 1875—1884 ..					22,951	30·01	..	2,149	2·81	280	0·37	14,333	18·74	2,034	2·66	178	·23	2,825	3·69	21,799	28·50	..

N. B.—The area in square mile for the Cantonment of Ahmednagar is included in the town of Ahmednagar, as it is not separately shown in the Census Report.

Amongst the rural circles the highest death-rate from all causes (40·67 per 1,000 against 24·52 in 1884), which is nearly the same as that in Karjat Táluka (40·12 against 27·57 in 1884), took place in Jámkhed Táluka, in which 168 deaths, or 2·77 per 1,000, were recorded from cholera. There were no deaths recorded from small-pox, whilst the death-rate (32·68 per 1,000) from fevers was the highest in the Collectorate. The death-rates from bowel-complaints and injuries were respectively 4·02 and 0·10, and from other causes 1·10 per 1,000.

In Karjat Táluka the death-rate from cholera was 0·72 and from small-pox 0·06. The death-rate (30·41) from fevers in this táluka was the next highest in the Collectorate.

The next highest death-rate from all causes (38·60 per 1,000 against 24·59 in 1884) occurred in Sangamner Táluka, in which 91 deaths, or 1·53 per 1,000, took place from cholera. Small-pox caused no death, whilst the death-rate from fevers was 24·93 per 1,000. From bowel-complaints and injuries the death-rates were, respectively, 2·77 and 0·17. The death-rate from other causes (9·20 per 1,000) was the highest in the rural registration circles.

The lowest recorded death-rate from all causes (28·53 per 1,000 against 27·87 in 1884) is found in Nagar Táluka, in which cholera carried off only 10 persons. Small-pox caused no death, whilst the death-rate (20·40) from fevers was the lowest in the rural registration circles. The recorded death-rate from bowel-complaints was 4·28 per 1,000 and from injuries 0·17. There were 253 deaths, or 3·54 per 1,000, from other causes.

In the urban circles the town of Sangamner shows the highest death-rate (47·06 per 1,000 against 22·40 in 1884) from all causes in the Collectorate, and in which 31 deaths, or 3·52 per 1,000, were recorded from cholera and 4 or 0·45 from small-pox. The death-rate from fevers was 21·94 per 1,000 and from bowel-complaints 2·62. The death-rates from injuries and other causes were, respectively, 0·57 and 17·96 per 1,000.

In the town of Ahmednagar the recorded death-rate from all causes was 31·33 per 1,000 against 33·97 in 1884, cholera caused 17 deaths or 0·52 per 1,000, and small-pox 2 or 0·06 in this town; whilst the death-rate (10·15 per

1,000) from fevers is the lowest in the rural and town circles. From bowel-complaints the death-rate was 2·34 and from injuries 0·21 per 1,000. The death-rate (18·05 per 1,000) from other causes was the highest in the Collectorate.

The death-rate from all causes (20·05 per 1,000 against 16·34 in 1884) in the cantonment of Ahmednagar is the lowest recorded in the Collectorate. There were 5 deaths or 1·09 from cholera, but none from small-pox. The death-rate (3·70 per 1,000) from fevers was the lowest recorded in the Collectorate. Bowel-complaints caused only 4 deaths, or 0·87 per 1,000, and the injuries caused no death. The death-rate from other causes was 14·38 per 1,000.

The registration of births throughout the greater part of the Collectorate during 1885 was exceedingly well performed, and is highly creditable to the village and district officers.

The registration of deaths in some tálukás needs improvement; but, on the whole, the registration of vital statistics in the Collectorate is very fairly carried out.

There has been some improvement in the registration of deaths in the cantonment of Ahmednagar, but a falling off in the birth-rate.

The registration of births in the town of Ahmednagar is not as well attended to as in the tálukás.

Poona.

30. The Collectorate of Poona is divided into 8 rural, 2 town and 2 cantonment circles. It contains 1,185 towns and villages, and covers an area of 5,348 square miles. The population is 900,621, and the average density per square mile amounts to 168·40 persons. The registration of births during the year was fairly carried out in Junnar, Indápur and Purandhar tálukás and in the town of Junnar. In other tálukás, in the city of Poona and in the cantonments of Poona and Kirkee the recorded birth-rate is below the standard (40 per 1,000). Amongst the rural circles the recorded birth-rate in 1885 is in excess of that for 1884 in Junnar, Khed, Sirúr and Haveli tálukás. In Indápur the birth-rate was 47·70 per 1,000 against 47·35 in 1884 and in Bhimthadi 36·45 against 36·87. The recorded birth-rates in Purandhar and Mával tálukás were respectively 40·59 and 30·06 against 42·07 and 41·02 per 1,000 in 1884. Amongst the town circles the town of Junnar shows an improvement. The recorded birth-rate in it was 46·18 per 1,000 against 43·29 in 1884. In the city of Poona the recorded birth-rate was 29·36 per 1,000 against 15·88 in 1884. It is very unsatisfactory to notice that in the city of Poona the registration of births is still so much neglected and so very far from being accurate. In the cantonments the recorded birth-rates in 1885 at Poona and Kirkee are lower than in 1884. In the former the recorded birth-rate was 24·96 per 1,000 against 27·07 in 1884, and in the latter 25·84 against 26·68. Amongst the rural circles the recorded birth-rate in each táluka, except Sirúr, is higher than the reported death-rate. In the táluka of Indápur the recorded birth-rate was 47·70 and the death-rate being 36·35 per 1,000. The birth-rate (33·66 per 1,000) in Sirúr Táluka was below the death-rate (38·63). Amongst the urban circles the recorded birth-rate (46·18 per 1,000) in the town of Junnar was higher than the death-rate (37·88); but in the city of Poona the recorded birth-rate (29·36) was considerably lower than the reported death-rate (37·04 per 1,000). In the cantonments of Poona and Kirkee the recorded birth-rates (24·96 and 25·84 per 1,000) respectively are below the death-rates (32·58 and 26·12)

The total number of deaths from all causes in 1885 was 30,033, against 21,332 in 1884 and a decennial mean of 21,180, the death-rate being 33·35 per 1,000 against 23·68 in 1884 and a decennial mean of 23·41.

The maximum monthly mortality (4,148) took place in August and the minimum (1,674) in April.

Cholera commenced in January, attained its maximum intensity in August, and continued till the close of the year. 2,639 deaths, or 2·93 per 1,000, were ascribed to it, against 11 or 0·01 in 1884 and a decennial mean of 2,012 or 2·22. The highest death-rate (6·67 per 1,000) from cholera in the Collectorate took

place in Khed Táluka. The next highest death-rate (5·95) was in Sirúr Táluka, whilst in Junnar Táluka the death-rate was 4·15 per 1,000. In other parts of the Collectorate the death-rate from cholera was below 3·00 per 1,000. Cholera prevailed in each táluka, town and cantonment in the Collectorate, except the town of Junnar and the Cantonment of Poona in which no deaths from this disease were recorded. Small-pox prevailed throughout the year, except September and October, and caused 262 deaths, the death-rate being 0·29 per 1,000 against 0·54 in 1884 and a decennial mean of 0·50. The mortality from fevers was very high (19,869) against 15,786 in 1884 and a decennial mean of 14,149, the death-rate per 1,000 of population being 22·06 against 17·53 in 1884 and a decennial mean of 15·64.

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each táluka, town and cantonment in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka, town and cantonment with that for 1884 and the zilla rate with that of 1884 and the mean of the previous 10 years:—

	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of Towns and Villages.	Births.			Deaths.																Ratio of Deaths from all Causes per 1,000 of Population in 1884.
									Cholera.		Small-pox.		Fevers.		Bowel-complaints.		Injuries.		Other Causes.		All Causes.				
						Number for 1885.	Ratio per 1,000 of Population.	Ratio per 1,000 of Population in 1884.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.			
Poona. Collectorate.	Junnar Rural Circle ..	91,900	610·64	150·50	153	4,153	45·16	42·81	381	4·15	..	..	2,610	28·40	221	2·40	45	·47	354	3·85	3,609	39·27			29·06
	Indápur " ..	48,114	567·	85·46	86	2,295	47·70	47·35	120	2·49	7	0·14	1,324	27·73	189	3·93	26	·54	73	1·52	1,749	36·35			23·79
	Khed " ..	141,890	888·	159·79	244	5,455	38·45	36·18	947	6·67	3	0·02	3,424	24·13	314	2·21	52	·37	574	4·05	5,314	37·45			22·28
	Sirúr " ..	72,793	577·	126·16	76	2,450	33·66	32·74	433	5·95	1	0·01	1,964	26·98	190	2·61	24	·33	200	2·75	2,812	38·63			24·81
	Purandhar " ..	75,678	470·	161·02	92	3,072	40·59	42·07	67	·89	26	0·33	1,873	24·75	109	1·44	29	·38	174	2·30	2,276	30·07			27·26
	Bhimthadi " ..	110,428	1,017·	108·49	129	4,025	36·45	36·87	153	1·40	27	0·24	2,509	22·72	270	2·45	32	·29	330	2·99	3,323	30·09			23·47
	Havell " ..	150,059	799·23	187·76	237	5,433	36·44	29·28	314	2·09	14	0·09	3,256	21·90	431	2·87	83	·55	491	3·27	4,619	30·78			24·25
	Mával " ..	62,383	385·	162·03	164	1,875	30·06	41·02	77	1·22	1	0·02	908	14·56	87	1·39	23	·37	243	3·90	1,339	21·46			16·39
	Poona City Town Circle ..	99,622	5·	19,924·40	1	2,925	29·36	18·88	144	1·45	183	1·84	1,343	13·48	272	2·73	58	·58	1,600	16·06	3,690	37·04			21·89
	Junnar " ..	10,373	0·36	28,813·89	1	479	46·18	43·29	..	..	..	..	144	13·88	25	2·41	2	·19	222	21·40	393	37·88			25·93
	Poona Cantonment ..	25,042	4·55	6,621·76	1	625	24·96	27·07	..	..	1	0·04	446	17·81	40	1·59	12	·48	317	12·66	816	32·58			27·23
	Kirkee " ..	8,560	4·22	1,718·48	1	92	25·84	26·68	1	·28	..	..	29	8·15	1	·28	3	·84	59	16·58	93	26·12			28·09
	Europeans, Eurasians and fighting men in the Cantonments of Poona and Kirkee	8,779																							
	1885 ..	900,621	5,348·	168·40	1,185	32,914	36·54	..	2,639	2·93	262	0·29	19,869	22·06	2,149	2·39	387	·43	4,727	5·25	30,033	33·35			..
	1884 ..					30,741	34·13	..	11	·01	308	0·54	15,786	17·53	1,764	1·96	353	·39	3,110	3·45	21,332	23·68			..
	Mean for 10 years 1875—1884 .					29,384	22·53	..	2,012	2·22	449	0·50	14,149	15·64	1,578	1·74	311	·34	2,681	2·96	21,180	23·41			..

Amongst the rural circles the highest death-rate from all causes (39·27 per 1,000 against 29·06 in 1884), which is also the highest in the Collectorate, took place in Junnar Táluka, in which 381 deaths, or 4·15 per 1,000, were attributed to cholera. Small-pox caused no deaths, whilst the death-rate from fevers (28·40) was the highest in the Collectorate. From bowel-complaints the rate was 2·40 per 1,000 and from injuries 0·47. The death-rate from other causes was 3·85 per 1,000.

The next highest death-rate from all causes (38·63 per 1,000 against 24·81 in 1884) took place in Sirúr Táluka, in which 433 deaths from cholera were recorded. The death-rate (5·95 per 1,000) is the highest in the Collectorate. Small-pox caused only one death, whilst the death-rate from fevers was 26·98 per 1,000. The rates from bowel-complaints and injuries were, respectively, 2·61 and 0·33 per 1,000, and from other causes 2·75.

The highest death-rate from bowel-complaints (3·93 per 1,000) in the Collectorate, in Indápur Táluka, is probably due, as noticed in last year, to an impure water-supply.

The lowest death-rate (21·46 per 1,000 against 16·39 in 1884) from all causes occurred in Mával Táluka, in which cholera caused 77 deaths, or 1·22 per 1,000.

Small-pox caused only 1 death, whilst the death-rate (14·56 per 1,000) from fevers was the lowest in the rural circles. The death-rate from bowel-complaints was 1·39, which is the lowest in the rural and town circles. From injuries and other causes the death-rates was respectively 0·37 and 3·90 per 1,000.

Among the urban circles the death-rate from all causes (37·88 per 1,000 against 25·93 in 1884), which is nearly the same as that in the city of Poona (37·04 against 21·89 in 1884), took place in the town of Junnar, in which no deaths either from cholera or small-pox were recorded. The death-rate from fevers was 13·88 per 1,000 and from bowel-complaints 2·41. From injuries, the death-rate (0·19 per 1,000) is the lowest in the Collectorate, and from other causes (21·40) was the highest in the Collectorate.

In the city of Poona there were reported 144 deaths, or 1·45 per 1,000, from cholera. Small-pox caused 183 deaths; the rate (1·84 per 1,000) is the highest in the Collectorate. From fevers and bowel-complaints the death-rates were respectively 13·48 and 2·73 and from injuries 0·58. The death-rate from other causes was 16·96 per 1,000.

Amongst the cantonment circles one death from cholera was reported in the cantonment of Kirkee and none in Poona. Small-pox caused only 1 death in the Poona Cantonment and none in Kirkee, whilst the death-rates from fevers were respectively 17·81 and 8·15 per 1,000. From bowel-complaints the death-rate in the Poona Cantonment was 1·59 and in Kirkee 0·28 per 1,000. The death-rates from injuries and other causes were respectively 0·48 and 12·66 per 1,000 for the cantonment of Poona and 0·84 and 16·58 for Kirkee.

In the tálukás of Khed, Sirúr, Bhimthadi and Haveli the recorded birth-rate is still below the standard. Although there is an improvement as compared with 1884 in Junnar and Indápur, it is above the standard, and this reflects credit on the district officers.

The low birth and death-rates in Mával Táluka raise well-grounded suspicion that the results shown are untrustworthy, and there is evidently great need for improvement in this táluka.

Sholápur.

31. The Collectorate of Sholápur comprises 7 rural and 3 town circles. It contains 712 towns and villages, and covers an area of 4,521 square miles. The population is 582,487, and the average density per square mile amounts to 128·84 persons. In 1885 the registration of births in each rural registration circle was most satisfactorily carried out, and shows much improvement on the results of 1884: it is, however, much neglected in the towns of Sholápur and Bársi, but in Pandharpur it has been very well attended to. Amongst the rural registration circles the birth-rate in each táluka is higher than the death-rate, but amongst the urban circles the birth-rate in each town was lower than the death-rate. This is particularly noticed in the town of Bársi, where the birth-rate (22·76 per 1,000) is less than half the death-rate (47·31). This shows that very little attention is paid by the Municipality of this town to the registration of births. In the town of Sholápur the recorded birth-rate (19·95 per 1,000) is far below the death-rate (33·86). These facts show unmistakeably that many births have escaped registration.

The number of deaths from all causes in 1885 amounted to 21,369, the death-rate being 36·69 per 1,000 of population against 25·04 in 1884 and a decennial mean of 28·10.

The maximum monthly mortality (2,990) took place in October and the minimum (875) in April.

Cholera commenced in the month of May, attained its maximum intensity in July, and continued to prevail till the close of the year: 2,357 deaths, or 4·04 per 1,000 against 0·05 in 1884, were ascribed to it. The death-rate from cholera (28·39 per 1,000) in the town of Pandharpur was the highest in the Collectorate. Amongst the rural circles the highest death-rate (6·98 per 1,000) in Málsiras Táluka is nearly the same as that in Pandharpur Táluka (6·37 per 1,000). In

Karmála Táluka the death-rate was 4·42 per 1,000, and in Sángola Táluka 3·85 per 1,000. In other tálukas and towns the death-rate was below 3·00 per 1,000. Cholera was present in each táluka and town in the Collectorate, but the death-rate (0·48 per 1,000) in the town of Sholápur was the lowest in the Collectorate. Small-pox prevailed to a slight extent throughout the year, except September, October and December, and caused 80 deaths against 364 in 1884 and a decennial mean of 1·68, the death-rate being 0·14 per 1,000 against 0·62 in 1884 and a decennial mean of 0·25. The death-rate from fevers (25·20 per 1,000) was much above the mean of 10 years (16·83) and in 1884 (18·70).

The following statement shows the number of births and deaths by causes and their ratios per 1,000 of population in each táluka and town in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka and town with that for 1884 and the zilla rate with that of 1884 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of Towns and Villages.	Births.			Deaths.														Ratio of Deaths from all Causes per 1,000 of Population in 1884.
									Cholera.		Small-pox.		Fevers.		Bowel-complaints.		Injuries.		Other Causes.		All Causes.		
						Number for 1885.	Ratio per 1,000 of Population.	Ratio per 1,000 of Population in 1884.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	
Sholápur	Sholápur R. C. ..	89,649	845·67	106·01	146	4,010	44·73	38·36	149	1·66	8	·09	1,528	17·04	174	1·94	23	·26	182	2·03	2,064	23·02	17·42
	Bársi „ ..	93,920	595·62	157·68	122	4,659	49·61	40·64	197	2·10	4	·04	2,597	27·65	211	2·25	31	·33	397	4·23	3,437	36·60	22·46
	Mádha „ ..	67,961	619·	109·79	89	3,495	50·10	43·77	191	2·81	5	·07	1,665	24·50	378	5·56	13	·19	189	2·78	2,441	35·91	23·73
	Karmála „ ..	61,548	766·	80·35	123	3,229	52·46	49·76	272	4·42	5	·08	2,021	32·84	134	2·18	11	·18	247	4·01	2,690	43·71	26·79
	Pandharpur „ ..	55,302	469·49	117·79	84	2,626	47·48	42·60	352	6·37	3	·06	1,455	26·31	173	3·13	5	·09	285	5·14	2,273	41·10	23·81
	Sángola „ ..	62,849	649·	96·84	76	3,057	48·64	45·51	242	3·85	41	·65	1,482	23·58	160	2·55	17	·27	343	5·46	2,285	36·36	24·87
	Málsiras „ ..	58,332	574·	101·62	69	2,425	41·59	39·67	407	6·98	14	·24	1,456	24·96	63	1·08	5	·09	111	1·90	2,056	35·25	23·40
	Sholápur T. C. ..	59,890	1·33	45,030·07	1	1,195	19·95	19·49	29	·48	..	..	1,475	24·63	149	2·49	12	·20	363	6·06	2,028	33·86	34·38
	Bársi „ ..	16,126	0·38	42,436·84	1	367	22·76	26·78	38	2·36	..	..	511	31·68	22	1·36	9	·56	183	11·35	763	47·31	39·31
	Pandharpur „ ..	16,910	0·51	33,156·86	1	775	45·83	47·31	480	28·39	..	..	486	28·74	235	13·90	7	·41	124	7·33	1,332	78·77	48·02
	1885 ..	582,487	4,521	128·84	712	25,838	44·36	..	2,357	4·04	80	·14	14,676	25·20	1,699	2·92	133	·23	2,424	4·16	21,369	36·69	..
	1884 ..					23,223	39·87	..	31	·03	364	·62	10,892	18·70	1,197	2·06	148	·25	1,957	3·36	14,589	25·04	.
	Mean for 10 years, 1875—1884 ..					14,376	21·66	..	1,458	2·20	168	·25	11,173	16·83	1,713	2·58	210	·32	3,929	5·92	18,641	28·10	.

Amongst the rural circles the highest death-rate from all causes (43·71 per 1,000 against 26·79 in 1884) took place in Karmála Táluka, in which cholera caused 272 deaths, or 4·42 per 1,000. There were only 5 deaths from small-pox, the rate being 0·08 per 1,000, whilst the death-rate (32·84 per 1,000) from fevers was the highest in the Collectorate. From bowel-complaints the death-rate was 2·18 per 1,000 and from injuries 0·18. There were 247 deaths from other causes, the rate being 4·01 per 1,000.

The next highest death-rate from all causes (41·10 per 1,000 against 23·81 in 1884) occurred in Pandharpur Táluka, in which 352 deaths were ascribed to cholera. The death-rate from this cause is 6·37 per 1,000. Small-pox caused only 3 deaths, or 0·06 per 1,000, whilst the death-rate from fevers was 26·31. From bowel-complaints and injuries the death-rates were respectively 3·13 and 0·09 per 1,000 and from other causes 5·14.

In the rural circles the highest death-rate (6·98 per 1,000) from cholera took place in the táluka of Málsiras. From small-pox the highest death-rate (0·65 per 1,000) is found in Sángola Táluka.

The lowest death-rate from all causes (23·02 per 1,000 against 17·42 in 1884) which is also the lowest in the Collectorate, is found in Sholápur Táluka, in which.

149 deaths were ascribed to cholera. The death-rate from this cause (1·66 per 1,000) was the lowest in the rural circles. Small-pox caused 8 deaths, or 0·09 per 1,000, whilst the death-rate from fevers (17·04 per 1,000) was the lowest in the Collectorate. From bowel-complaints the death-rate was 1·94 per 1,000 and from injuries 0·26. Other causes caused 182 deaths, or 2·03 per 1,000.

Amongst the urban circles and in the Collectorate the apparently high death-rate from all causes (78·77 per 1,000 of population against 48·02 in 1884) was registered in the town of Pandharpur. Cholera caused 480 deaths; but it must be remembered that at the time of the annual jatra, the population was much augmented by pilgrims, and that, therefore, the death-rate cannot be accepted as correct. There were no deaths from small-pox, whilst the death-rate from fevers was 28·74 per 1,000. The enormously high death-rate from bowel-complaints (13·90 per 1,000) is probably due to an impure water-supply. The rate from injuries was 0·41, and from other causes 7·33 per 1,000.

The next highest death-rate from all causes (47·31 per 1,000 against 39·31 in 1884) occurred in the town of Bársi, in which 38 deaths, or 2·36 per 1,000, from cholera were recorded. Small-pox caused no death, whilst the death-rate from fevers (31·68 per 1,000) was the highest in the urban circles. The death-rate from bowel-complaints was 1·36 per 1,000 and from injuries 0·56. The death-rate (11·35 per 1,000) from other causes is the highest in the Collectorate.

In the town of Sholápur the death-rate from all causes (33·86 per 1,000 against 34·38 in 1884) is the lowest in the urban circles. Twenty-nine deaths were ascribed to cholera. The death-rate (0·48 per 1,000) from this cause is the lowest in the Collectorate. Small-pox caused no death, whilst the death-rate from fevers was 24·63 per 1,000. From bowel-complaints and injuries the death-rates were respectively 2·49 and 0·20 per 1,000, and from other causes 6·06.

The registration of births in the towns of Sholápur and Bársi requires much greater attention. It is satisfactorily carried out in the other parts of the Collectorate; but the death registration in the táluka of Sholápur is evidently inaccurate, and steps should be taken to improve it.

Sátára.

32. The Collectorate of Sátára is divided into 12 rural and 3 town circles, and contains 1,343 towns and villages. It covers an area of 4,988 square miles. The population is 1,062,350, and the average density per square mile amounts to 212·98 persons. The registration of births is very satisfactorily performed throughout the Collectorate, except in the táluka of Jávli and the towns of Sátára and Karád, in which the birth-rate is below the standard (40 per 1,000). The recorded birth-rate for 1885 shows an improvement over that for the previous year in each rural registration circle, except the tálukás of Jávli and Tásgaon. The most notable instance is the táluka of Málcolmpeth, in which the recorded birth-rate is 66·81 per 1,000 against 48·64 in 1884. The birth-rate in Karád Táluka (45·27 per 1,000) in 1885 is nearly the same as that of the preceding year (45·25); but in the tálukás of Jávli and Tásgaon the birth-rates are 32·64 and 46·87 per 1,000, against 33·48 and 47·99 in 1884 respectively. In the táluka of Pátan the birth-rate is 46·18 per 1,000 against 36·87 in 1884. Amongst the urban circles the birth-rate in this year in each town is in excess of that for 1884, except the town of Karád, in which the recorded birth-rate is only 23·47 against 28·21 per 1,000 in 1884. Amongst the rural circles the recorded birth-rate in each táluka in 1885 is higher than the death-rate. Amongst the urban circles it is also higher in all the towns, except the town of Karád, in which the recorded birth-rate is 23·47 per 1,000 and the death-rate 35·44.

The number of deaths from all causes in 1885 amounted to 36,968 against 28,271 in 1884 and a decennial mean of 28,247, the death-rate being 34·80 per 1,000 of population against 26·61 in 1884 and a decennial mean of 26·61.

The maximum monthly mortality (5,529) took place in August, and the minimum (1,777) in April.

Cholera commenced in March and disappeared in the same month, but reappeared in June, attained its maximum intensity in July, and continued to prevail till the close of the year; 3,152 deaths, or 2·97 per 1,000, were ascribed to it, against 0·09 in 1884 and a decennial mean of 2·10. The highest death-rate

from cholera (11·78 per 1,000) in the Collectorate took place in the town of Karád. Amongst the rural circles the highest death rate (5·62) was in Mán Táluka. The next highest (4·70 per 1,000), which is nearly the same as that in Khatáv Táluka (4·43), was reported from Karád Táluka. The death-rates (3·37 per 1,000) in the Khánápur Táluka and (3·09) in the Pátan Táluka are nearly the same. Amongst the urban circles the death-rate in the town of Wái was 7·54 per 1,000; but in the town of Sátára the death-rate (0·44) was the lowest in the Collectorate. Cholera prevailed in each táluka and town in the Collectorate, except Malcolmpeth, for which no deaths were reported. Small-pox prevailed till August to a slight extent, and caused 42 deaths against 1,217 in 1884 and a decennial mean of 284, the death-rate being 0·04 per 1,000 against 1·15 in 1884 and a decennial mean of 0·27. The deaths from fevers were 25,053 against 21,369 in 1884 and a decennial mean of 19,711. The death-rate (23·58) being accordingly higher than 1884 (20·11) and the decennial mean (18·57).

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka and town with that for 1884 and the zilla rate with that of 1884 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of Towns and Villages.	Births. Number for 1885.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1884.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1884.
Sátára	Sátára R.C. ..	90,885	335·18	271·15	147	4,399	48·40	44·43	153	1·68	3	·03	2,849	31·35	132	1·45	22	·24	374	4·12	3,533	38·87	30·08
	Jávli " ..	60,481	419·	144·35	252	1,974	32·64	33·48	29	·48	2	·03	1,066	17·62	34	·56	12	·20	188	3·12	1,331	22·01	18·68
	Wái " ..	76,934	390·	197·27	124	3,556	46·22	42·72	109	2·39	3	·04	2,684	27·09	137	1·78	24	·31	247	4·51	2,794	36·32	30·39
	Karád " ..	130,142	394·63	329·78	163	5,891	45·27	45·25	612	4·70	3	·02	3,184	24·47	785	6·03	42	·32	717	5·51	5,343	41·06	27·15
	Válva " ..	169,408	543·	311·99	136	6,981	41·21	36·21	361	2·13	3	·01	3,081	18·19	681	4·02	54	·32	684	4·04	4,864	28·71	22·95
	Tásgaon " ..	79,704	341·	233·74	49	3,736	46·87	47·09	132	1·66	4	·05	1,267	15·89	485	6·08	19	·24	537	6·74	2,444	30·66	26·34
	Khánápur " ..	80,327	531·	151·27	91	4,090	50·92	48·49	271	3·37	1	·01	1,958	24·38	324	4·03	23	·29	550	6·83	3,127	38·92	23·89
	Khatáv " ..	74,027	497·	148·95	84	3,947	53·32	52·94	328	4·43	5	·07	2,190	29·45	81	1·09	15	·20	309	4·08	2,911	39·32	39·23
	Mán " ..	62,111	649·	80·29	78	3,133	50·12	56·37	393	5·62	8	·15	1,416	27·17	47	·90	7	·13	355	6·81	2,126	40·79	29·63
	Malcolmpeth " ..	3,248	..	..	..	217	66·81	48·64	..	..	1	·31	90	27·71	8	2·45	3	·92	22	6·77	124	38·18	34·17
	Koregaon " ..	81,187	349·	232·63	74	3,699	45·56	43·93	198	2·44	5	·06	2,735	33·69	195	2·40	17	·21	238	2·93	3,388	41·73	29·10
	Pátan " ..	112,414	536·	209·73	207	5,191	46·18	36·87	348	3·09	2	·02	2,385	21·22	217	1·93	29	·26	374	3·33	3,355	29·85	24·29
	Sátára T.C. ..	29,028	0·32	25,400·	1	914	31·48	27·76	13	·44	1	·03	435	15·33	236	8·13	2	·07	127	4·37	814	28·37	25·78
	Karád " ..	10,773	0·37	29,129·73	1	253	23·47	28·21	127	11·78	..	..	156	14·47	27	2·51	3	·28	69	6·40	382	35·44	25·24
	Wái " ..	11,676	2·	5,838·	1	486	41·62	38·45	88	7·54	1	·09	167	14·30	37	3·17	2	·17	137	11·73	432	37·00	31·77
	1885 ..	10,62,350	4,968·	212·98	1,343	48,467	45·62	..	3,152	2·97	42	·04	25,053	23·58	3,426	3·22	274	·26	5,021	4·73	36,966	34·80	..
	1884 ..					45,484	42·81	..	99	·09	1,217	1·15	21,369	20·11	2,016	1·90	349	·33	3,221	3·03	28,271	26·61	..
	Mean for 10 years, 1875—1884 ..					32,491	30·61	..	2,228	2·10	284	·27	19,711	18·57	2,725	2·57	392	·37	2,907	2·74	28,247	26·61	..

N. B.—The area in square miles of Malcompeth is included in Jávli Táluka, as in the Census Report.

Amongst the rural registration circles, and also in the Collectorate, the highest death-rate from all causes (41·73 per 1,000 of population against 29·10 in 1884), which is nearly the same as that in the táluka Karád (41·05 against 27·15 in 1884), took place in Koregaon Táluka, in which cholera caused 198 deaths or 2·44 per 1,000. Small-pox caused only 5 deaths, or 0·06 per 1,000; whilst the death-rate (33·69 per 1,000) from fevers was the highest in the Collectorate. The death-rate from bowel-complaints was 2·40 per 1,000 and from injuries 0·21; from other causes the rate was 2·93.

In the táluka of Karad there were 612 deaths, or 4·70 per 1,000, from cholera, and 3 or 0·02 from small-pox. The death-rate from fevers was 24·47. From bowel-complaints the rate (6·03), which is nearly the same as that in Tásgaon Táluka (6·08 per 1,000), was the highest in the rural circles. From injuries and other causes the rates were respectively 0·32 and 5·51 per 1,000.

The highest death-rates from cholera (5·62 per 1,000) in the rural circles was in Mán Táluka, but no death occurred from this cause in Malcolmpeth.

The lowest death-rate from all causes (22·01 per 1,000 against 18·68 in 1884) occurred in Jávli Táluka; in which 29 deaths were reported from cholera. The

death-rate (0·48) is the lowest in the rural circles. Small-pox caused 2 deaths, or 0·03 per 1,000, whilst the death-rate from fevers was 17·62 per 1,000. The death-rate (0·56) from bowel-complaints was the lowest in the Collectorate. From injuries the rate was 0·20 and from other causes 3·12 per 1,000.

The next lowest death-rate from all causes (28·71 per 1,000 against 22·25 in 1884) occurred in Válva Táluka, in which 361 deaths, or 2·13 per 1,000, were reported from cholera. Small-pox caused only 3 deaths, or 0·02 per 1,000, whilst the death-rate from fevers was 18·19. From bowel-complaints the rate was 4·02 and from injuries 0·32 per 1,000. The death-rate from other causes was 4·04.

Amongst the urban circles the highest death-rate from all causes (37·00 against 31·77 in 1884) took place in the town of Wái, in which cholera caused 88 deaths, or 7·54 per 1,000. Only 1 death from small-pox was reported; whilst the death-rate (14·30 per 1,000) from fevers was the lowest in the Collectorate. The death-rate from bowel-complaints was 3·17 and from injuries 0·17 per 1,000. The death-rate from other causes (11·73 per 1,000) was the highest in the Collectorate.

The lowest death-rate from all causes (28·37 per 1,000 against 25·73 in 1884) was reported from the town of Sátára, in which 13 deaths were ascribed to cholera. The death-rate (0·44) from this cause was the lowest in the Collectorate. Small-pox caused only 1 death, whilst the death-rate from fevers was 15·33. The death-rate (8·13) from bowel-complaints was the highest in the Collectorate. From injuries and other causes the rates were respectively 0·07 and 4·37 per 1,000.

In the town of Karád the death-rate from all causes was 35·44 per 1,000 against 25·24 in 1884. Cholera caused 127 deaths: the death-rate (11·78 per 1,000) was the highest in the Collectorate. There were no deaths from small-pox, whilst the death-rate from fevers was 14·47 per 1,000. From bowel-complaints and injuries the rates were respectively 2·51 and 0·28 per 1,000. The death-rate from other causes was 6·40.

The registered births are much below than they ought to be in the towns of Sátára and Karád, and the death-rate in the town of Sátára cannot be accepted as correct.

The registration of births and deaths in the town of Wái appears to have been carefully attended to.

The low birth and death-rates in the táluka of Javli afford a proof that the registration of vital statistics in this táluka requires improvement.

Ratnágiri.

33. The Collectorate of Ratnágiri is divided into 8 tálukas and 2 towns. It contains 1,297 towns and villages, and covers an area of 3,922 square miles. The population is 997,090, and the average density per square mile amounts to 254·22 persons. The recorded birth-rate for 1885 in each táluka and town, except Ratnágiri, though it shows some improvement over the results of the previous year, is still extremely defective, being far below the standard (40 per 1,000). The táluka of Sangameshvar records an extremely low birth-rate (19·96 per 1,000 against 17·93 in 1884). In the town of Ratnágiri the birth-rate was 26·55 per 1,000 against 29·04 in 1884. Amongst the rural and urban circles the recorded birth-rate in each táluka and town exceeds the death-rate. In Devgad Táluka the birth-rate (26·40 per 1,000) is double the recorded death-rate (13·38), and in Rájápur the birth-rate (25·82) is nearly double the death-rate (13·29 per 1,000).

The total number of deaths from all causes in 1885 was 14,653, the death-rate being 14·70 per 1,000 against 15·84 in 1884 and a decennial mean of 17·60.

The maximum monthly mortality (1,407) took place in August and the minimum (1,052) in June.

Cholera was present at the close of 1884, and in 1885 it continued to prevail till April. It disappeared in May, but re-appeared in June, attained its maximum intensity in July, and continued to prevail till September. It again disappeared in October, but re-appeared in November, and in December it again left the Collectorate. The number of recorded deaths from this cause was 123 against 144 in

1884 and a decennial mean of 563. The death-rate being 0·12 per 1,000 against 0·14 in 1884 and a decennial mean of 0·56. Cholera was present in this Collectorate in only Málvan, Sangameshvar, Chiplún, Khed and Dápoli tálukás. The remaining tálukás and towns were free from it. The highest death-rate (0·41 per 1,000) in the Collectorate was in Dápoli Táluka, and the lowest (0·06), which is nearly the same as that in Sangmeshvar (0·06), took place in Málvan Táluka. Small-pox prevailed throughout the year to a slight extent, and caused 162 deaths, or 0·16 per 1,000, against 1·17 in 1884 and a decennial mean of 0·48. The death-rate from fevers (8·28 per 1,000) was nearly the same as that for the previous year (8·06) and a little below the mean (9·75).

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the birth-rate and the death-rate from all causes in each *táluka* and town with that for 1884 and the zilla rate with that of 1884 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile	Number of Towns and Villages.	Births. Number for 1885.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1884.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1884.
Ratnágiri.	Málvan R.C. ..	109,953	431·96	254·34	67	2,667	24·26	20·83	7	·06	3	·03	381	3·28	122	1·11	34	·31	1,026	9·35	1,555	14·14	15·29
	Devgad " ..	117,899	543·	217·13	121	3,113	26·40	22·42	..	..	1	·01	637	5·40	124	1·05	53	·45	763	6·47	1,578	13·38	15·33
	Rájápur " ..	127,999	512·	250·00	174	3,305	25·82	22·21	..	..	22	·17	931	7·27	244	1·91	54	·42	451	3·52	1,702	13·29	13·24
	Ratnágiri " ..	113,611	302·97	374·99	145	3,139	27·63	23·86	..	..	10	·09	1,104	9·72	227	2·00	36	·32	418	3·68	1,795	15·80	16·46
	Sangameshvar " ..	104,640	557·	187·96	178	2,089	19·96	17·93	6	·06	45	·43	767	7·33	123	1·17	24	·23	294	2·81	1,259	12·03	14·76
	Chiplún " ..	168,921	670·	252·12	212	3,807	22·54	18·23	18	·11	8	·05	1,597	9·45	237	1·40	49	·29	568	3·36	2,477	14·66	13·14
	Khed " ..	91,492	400·	228·73	146	2,136	23·25	20·20	34	·37	20	·22	1,091	11·92	·76	·83	28	·31	199	2·17	1,448	15·82	16·99
	Dápoli " ..	141,012	505·	279·23	·247	3,334	23·64	19·18	58	·41	52	·37	1,618	11·47	114	·81	36	·26	32	3·77	2,410	17·09	17·72
	Vengúrla T.C. ..	8,947	0·03	298,233·	1	250	27·94	26·48	..	..	..	..	41	4·60	2	·22	2	·22	158	17·44	201	22·47	33·76
	Ratnágiri " ..	12,615	0·04	315,400·	1	335	26·55	29·04	..	..	1	·08	104	8·24	6	·48	1	·08	116	9·19	228	18·07	21·16
	1885 ..	997,090	3,922·	254·22	1,297	24,175	24·26	..	123	·12	162	·16	8,251	8·28	1,275	1·28	317	·32	4,525	4·54	14,653	14·70	..
	1884 ..					20,599	20·66	..	144	·14	1,171	1·17	8,036	8·06	1,034	1·04	353	·35	5,060	5·08	15,798	15·84	..
	Mean for 10 years, 1875—1884 ..					16,593	16·42	..	563	·56	489	·48	9,847	9·75	1,427	1·41	411	·41	5,046	4·99	17,783	17·60	..

Amongst the rural circles the highest death-rates from all causes (17·09 per 1,000 against 17·72 in 1884) took place in Dápoli Táluka, in which cholera caused 58 deaths. The death-rate (0·41) is the highest in the Collectorate. Small-pox caused 52 deaths, or 0·37 per 1,000, whilst the death-rate from fevers was 11·47 per 1,000. From bowel-complaints the death-rate was 0·81 and from injuries 0·26 per 1,000. The rate from other causes was 3·77.

The next highest death-rate from all causes (15·82 per 1,000 against 16·99 in 1884), which is nearly the same as that in the Táluka Ratnágiri (15·80 against 16·46 in 1884), occurred in Khed Táluka, in which cholera caused 34 deaths, or 0·37 per 1,000. From small-pox the death-rate was 0·22 per 1,000, whilst the death-rate (11·92) from fevers was the highest in the Collectorate. The death-rates from bowel-complaints and injuries were respectively 0·83 and 0·31 per 1,000 and from other causes 2·17.

In Ratnágiri Táluka no death took place from cholera, but 10 from small-pox. The death-rate from fevers was 9·72 per 1,000, and from bowel-complaints (2·00) was the highest in the Collectorate.

The lowest death-rate from all causes (12·03 per 1,000 against 14·76 in 1884), which is also the lowest in the Collectorate, took place in the Sangmeshvar Táluka, in which 6 deaths, or 0·06 per 1,000, were reported from cholera. Small-pox caused 45 deaths; the death-rate (0·43 per 1,000) was the highest in the Collectorate. The death-rate from fevers was 7·33 and from bowel-complaints 1·17 per 1,000. From injuries the rate was 0·23 and from other causes 2·81 per 1,000.

The next lowest death-rate from all causes (13·29 per 1,000 against 13·24 in 1884), which is nearly the same as that in Devgad Táluka (13·38 against 15·33 in 1884), occurred in Rájápur Táluka, in which no death was reported from cholera. Small-pox caused 22 deaths, or 0·17 per 1,000, whilst the death-rate from fevers was 7·27. From bowel-complaints the rate was 1·91, and from injuries 0·42 per 1,000. The death-rate from other causes was 3·52 per 1,000.

In Devgad Táluka no deaths from cholera were recorded. Small-pox caused only 1 death, whilst the death-rate from fevers was 5·40 per 1,000.

In the town of Vengúrla the recorded death-rate from all causes (22·47 per 1,000 against 35·576 in 1884) was the highest in the Collectorate. No deaths were recorded either from cholera or small-pox, whilst the recorded death-rate from fevers was only 4·60. The death-rate from bowel-complaints (0·22 per 1,000) was the lowest in the Collectorate. From injuries the rate was 0·22. The high death-rate (17·44 per 1,000) from all causes in the Collectorate is probably due to ignorance as to the cause under which the deaths should be registered.

In the town of Ratnágiri the recorded death-rate from all causes was 18·07 per 1,000 against 21·16 in 1884. No deaths were recorded from cholera. Small pox caused only 1 death, whilst the death-rate from fevers was 8·24 per 1,000. From bowel-complaints the rate was 0·48 and from injuries 0·08 per 1,000. The death-rate from other causes was 9·19.

The registration of births and deaths both in the towns of Vengurla and Ratnágiri is not accurate, and cannot be accepted as correct.

The registration of vital statistics in the tálukás in 1885 continues to be, as pointed out last year, extremely defective, and it is hoped that Government will be pleased to call upon the authorities concerned to pay more attention to this subject in future.

SOUTHERN REGISTRATION DISTRICT.

Collectorates.

1. Belgaum.	3. Bijápur.
2. Dhárwár.	4. Kánara.

Belgaum.

34. The Collectorate of Belgaum is divided into 7 tálukás (rural circles) 3 towns (urban circles), and 1 cantonment. It contains 1,077 towns and villages, and covers an area of 4,657 square miles. The population is 864,014, and the average density per square mile amounts to 185·53 persons. Amongst the rural circles the registration of births is fairly carried out in each táluka, except in the táluka of Khánápur, in which the birth-rate is below the standard (40 per 1,000). In the urban circles the registration of births in the town of Belgaum is much neglected, as the birth-rate (23·06 per 1,000) in it is far below the standard. In the town of Athni the registration of births is carefully kept; but at Gokák the birth-rate does not quite reach the standard. The recorded birth-rate in 1885 is in excess of that for the previous year in each táluka, except Athni and Gokák, in which for the former it was 45·67 per 1,000 against 47·29 in 1884, and in the latter 46·94 against 50·37. In the town of Belgaum the recorded birth-rate (23·06 per 1,000) is the same as that for 1884 (23·02), but at Gokák the birth-rate was 38·81 against 43·37 per 1,000 in 1884. The recorded birth-rate in the town of Athni is 48·81 per 1,000 against 42·73 in 1884. The birth-rate throughout the Collectorate, except the táluka of Sampgaon and the cantonment of Belgaum, was higher than the death-rate. The birth-rate in Belgaum Táluka (49·30 per 1,000) was considerably higher than the recorded death-rate (27·78). The birth-rate (45·67) in Athni Táluka was also much higher than the recorded death-rate (27·57). The birth-rate (44·27 per 1,000) in Sampgaon Táluka was lower than the death-rate (45·73 per 1,000). Among the town circles a considerably higher birth-rate (48·81 per 1,000) than death-rate (27·80)

was recorded in the town of Athni. In Gokák the birth-rate was 38·81, whilst the death-rate in it amounted to 34·35 per 1,000. The birth-rate (23·06 per 1,000) in the town of Belgaum was slightly higher than the death-rate (22·24), and in the cantonment of Belgaum the birth-rate (16·18) was lower than the death-rate (19·93 per 1,000). The registration of vital statistics in the town and cantonment of Belgaum requires much more attention being paid to it before it can be considered even approximately correct.

The total number of deaths from all causes in 1885 amounted to 27,646, the death-rate being 32·00 per 1,000 against 32·40 in 1884 and a decennial mean of 34·44.

The maximum monthly mortality (4,215) took place in June and the minimum (1,554) in February.

Cholera was present at the close of 1884, and in 1885 attained its maximum intensity in June, and continued to prevail till November. It disappeared in December after causing 3,749 deaths against 2,701 in 1884 and a decennial mean of 2,666, the death-rate being 4·54 per 1,000 against 3·13 in 1884 and a decennial mean of 2·93. Cholera was present in this Collectorate in each táluka and town, except the town of Athni, in which there were no deaths recorded from it. The highest recorded death-rate (13·15 per 1,000) in the Collectorate, and which is nearly the same as that in the town of Gokák (13·10), took place in Sampgaon Táluka. The next highest death-rate (3·44 per 1,000), which is nearly the same as that in the town of Belgaum (3·11 per 1,000) and in Khánápur Táluka (3·00), was reported from Parasgad Táluka. In the other tálukas and the cantonment of Belgaum the recorded death-rate was below 3·00 per 1,000. Small-pox prevailed throughout the year to a very slight extent, and caused only 144 deaths, or 0·17 per 1,000, against 2,486 or 2·87 in 1884 and a decennial mean of 569 or 0·62. The deaths from fevers in 1885 were nearly the same as that for 1884—12,176 against 12,138 in 1884 and a decennial mean of 15,620. The death-rate (14·09 per 1,000) was the same (1,405) as that for 1884. The mean rate of 10 years was 17·19.

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each táluka, town and cantonment in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka, town and cantonment with that for 1884 and the zilla rate with that of 1884 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square mile.	Average Population per square mile.	Number of Towns and Villages.	Births.			Deaths.																	
									Cholera.		Small-pox.		Fevers.		Bowel-complaints.		Injuries.		Other Causes.		All Causes.		
						Number for 1885.	Ratio per 1,000 of Population.	Ratio per 1,000 of Population in 1884.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1884.
Belgaum	Belgaum Rural Circle.	95,780	661·55	144·78	199	4,722	49·30	38·29	278	2·90	..	..	1,400	14·62	526	5·49	16	·17	441	4·60	2,661	27·78	32·58
	Sampgaon " ..	119,843	425·	281·98	123	5,306	44·27	39·43	1,576	13·15	34	·28	2,596	21·66	659	5·50	26	·22	589	4·92	5,489	45·73	38·93
	Khánápur " ..	79,264	632·	125·42	119	3,089	38·97	35·41	238	3·00	61	·77	1,677	21·16	415	5·24	32	·40	412	5·20	2,835	35·77	33·00
	Chikodi " ..	245,614	840·	292·40	213	10,823	44·06	39·83	661	2·69	5	·02	2,618	10·66	1,647	6·71	76	·31	2,200	8·95	7,207	29·34	31·76
	Athni " ..	94,775	786·68	120·57	80	4,328	45·67	47·29	216	2·28	8	·08	1,035	10·92	734	7·75	35	·36	587	6·19	2,613	27·57	32·35
	Gokák " ..	82,722	670·61	123·35	113	3,883	46·94	50·37	246	2·97	15	·18	1,190	14·39	455	5·50	27	·32	725	8·76	2,658	32·13	36·22
	Parásgad " ..	91,828	640·	143·48	127	4,164	45·35	42·82	316	3·44	20	·22	1,228	13·37	567	6·17	24	·26	657	7·26	2,822	30·73	28·79
	Belgaum Town Circle.	23,115	0·45	51,366·67	1	533	23·06	23·02	72	3·11	..	..	217	9·39	30	1·30	12	·52	183	7·92	514	22·24	28·86
	Gokák " ..	10,307	0·39	26,428·21	1	400	38·81	43·37	135	13·10	..	..	64	6·21	33	3·20	6	·58	116	11·26	354	34·35	30·46
	Athni " ..	11,186	0·92	12,158·70	1	546	48·81	42·73	..	..	1	·09	76	6·79	154	13·77	3	·27	77	6·88	311	27·80	27·09
	Belgaum Cantonment..	9,582	..	..	..	155	16·18	13·29	11	1·15	..	..	73	7·83	44	4·59	5	·52	56	5·84	191	19·93	16·49
	1885 ..	864,014	46·57	185·53	1,077	37,949	43·92	..	3,749	4·34	144	·17	12,176	14·09	5,254	6·09	250	·30	6,053	7·01	27,646	32·00	..
	1884 ..					35,139	40·67	..	2,701	3·13	2,486	2·87	12,138	14·05	4,689	5·43	293	·34	5,680	6·58	27,998	32·40	..
	Mean for 10 years, 1875—1884 ..					25,907	29·61	..	2,666	2·93	569	·62	15,620	17·19	3,358	3·69	359	·40	8,734	9·61	31,306	34·44	.

N.B.—The area of the cantonment of Belgaum is included in the town of Belgaum, as it is not separately shown in the Census Report.

Amongst the rural circles and in the Collectorate the highest death-rate from all causes (45·73 per 1,000 against 38·93 in 1884) took place in Sampgaon Táluka, in which 1,576 deaths were ascribed to cholera. The death-rate (13·15 per 1,000) from this cause was the highest in the Collectorate. Small-pox caused 34 deaths, or 0·28 per 1,000, whilst the death-rate (21·66) from fevers was the highest in the Collectorate. The death-rate from bowel-complaints was 5·50 per 1,000 and from injuries 0·22. From other causes the rate was 4·92.

The next highest death-rate from all causes (35·77 per 1,000 against 33·00 in 1884) occurred in Khánápur Táluka, in which cholera caused 238 deaths, or 3·00 per 1,000. From small-pox there were 61 deaths; the death-rate (0·77 per 1,000) was the highest in the Collectorate. The death-rate (21·16 per 1,000) from fevers was the next highest in the Collectorate. From bowel-complaints and injuries the death-rates were respectively 5·24 and 0·40 per 1,000, and from other causes 5·20.

The lowest death-rate from all causes (27·57 per 1,000) against 29·35 in 1884, which is nearly the same as that of Belgaum Táluka (27·78 against 32·58 in 1884), was reported from Athni Táluka, in which 216 deaths were recorded from cholera; the death-rate (2·28 per 1,000) was the lowest in the rural circles. Small-pox caused 8 deaths, or 0·08 per 1,000, whilst the death-rate from fevers was 10·92. The death-rate (7·75 per 1,000) from bowel-complaints was the highest in the rural circles. From injuries the rate was 0·35, and from other causes 6·19 per 1,000.

In Belgaum Táluka 278 deaths, or 2·90 per 1,000, were recorded from cholera. Small-pox caused no deaths, whilst the death-rate from fevers was 14·62 per 1,000. From bowel-complaints the death-rate was 5·49, and from injuries the rate (0·17 per 1,000) was the lowest in the Collectorate. The death-rate (4·60 per 1,000) from other causes was also the lowest in the Collectorate.

Amongst the urban circles the highest death-rate from all causes (34·35 per 1,000 against 30·46 in 1884) took place in the town of Gokák, in which cholera caused 135 deaths, or 13·10 per 1,000. No deaths were ascribed to small-pox, whilst the death-rate (6·21 per 1,000) from fevers was the lowest in the Collectorate. The death-rate from bowel-complaints was 3·20 and from injuries 0·58 per 1,000. From other causes the rate (11·26 per 1,000) was the highest in the Collectorate.

The lowest recorded death-rate from all causes (22·24 per 1,000 against 28·86 in 1884) occurred in the town of Belgaum, in which 72 deaths, or 3·11 per 1,000, were reported from cholera. No death from small-pox occurred, whilst the death-rate from fevers was 9·39 per 1,000. The death-rate (1·30 per 1,000) from bowel-complaints was the lowest in the Collectorate. From injuries and other causes the respective rates were 0·52 and 7·92 per 1,000.

The death-rate from all causes in the town of Athni was 27·80 per 1,000 against 27·09 in 1884. There were no deaths from cholera, but only one from small-pox, whilst the death-rate from fevers was 6·79 per 1,000. The highest death-rate in the Collectorate in this town from bowel-complaints (13·77 per 1,000) was probably due to an impure water-supply. From injuries the rate was 0·27 and from other causes 6·88 per 1,000.

In the cantonment of Belgaum the death-rate from all causes (19·93 per 1,000 against 16·49 in 1884) was the lowest in the Collectorate. There were 11 deaths from cholera, the death-rate (1·15 per 1,000) was the lowest in the Collectorate. Small-pox caused no death, whilst the death-rate from fevers was 7·83 per 1,000. From bowel-complaints and injuries the death-rates were respectively 4·59 and 0·52 per 1,000. From other causes the rate was 5·84 per 1,000.

The registration of births in each táluka and in the towns of Athni and Gokák is fairly carried out in this Collectorate; but in the town of Belgaum it is not accurate, and that of deaths in the town of Athni as well as in Belgaum is also incorrect.

The registration of vital statistics in the cantonment of Belgaum is very defective, and cannot be accepted as correct.

Dhárwár.

35. The Collectorate of Dhárwár is divided into 11 tálukás and 4 pethas, forming 14 rural circles and 4 town circles. It contains 1,285 towns and villages, and covers an area of 4,535 square miles. The population is 882,907, and the average density per square mile amounts to 194·68 persons. The registration of births in each táluka and its petha and in the towns, except the towns of Hubli and Gadag Betgeri, is fairly carried out. The recorded birth-rate (35·77 and 39·00) in the towns of Hubli and Gadag Betgeri respectively are below the standard (40 per 1,000). Amongst the rural registration circles the registration of births has been greatly improved. The recorded birth-rate in each táluka and its petha is in excess of that for the previous year, except the táluka Navalgund and its petha Nárgund, in which the recorded birth-rate, (48·77) is nearly the same as that for 1884 (48·09). Amongst the urban circles the town of Dhárwár shows great improvement in the registration of births over last year. The recorded birth-rate (42·73 per 1,000) in it is far in excess of 1884 (27·95). At Hubli the recorded birth-rate (35·77 per 1,000) is nearly the same as that in 1884 (35·01); but the birth-rate in the town of Gadag Betgeri is far below that for the previous year (39·00 per 1,000 against 49·29 in 1884). The recorded birth-rate in the town of Ránebennur is 47·05 against 50·68 per 1,000 of population in 1884. The recorded birth-rate in this Collectorate is higher than the death-rate in each táluka and town, except the táluka of Dhárwár and its petha Mugúd, in which the birth-rate is 49·88 and the death-rate 51·28 per 1,000. In Ron Táluka the birth-rate (51·33 per 1,000) is more than double the recorded death-rate (22·09). In Gadag Táluka and its petha Mundargi the birth-rate (54·37 per 1,000) is considerably higher than the recorded death-rate (28·45). Amongst the urban circles the birth-rates in the towns of Ránebennur (47·05 per 1,000) and Gadag Betgeri (39·00) are much higher than the death-rates (26·27) and (23·64) respectively. The towns of Dhárwár and Hubli record 42·73 and 35·77 respectively as their birth-rates, and 38·10 and 25·93 per 1,000 as their death-rates.

The total number of deaths from all causes in 1885 amounted to 28,829, the death-rate being 32·65 per 1,000 against 34·17 in 1884 and a decennial mean of 34·26.

The maximum monthly mortality (2,987) took place in June and the minimum (1,960) in February.

Cholera commenced in February, attained its maximum intensity in June, and disappeared in November. Thirteen hundred and fifty-four deaths were attributed to it, against 4,655 in 1884 and a decennial mean of 2,476, the death-rate being 1·53 per 1,000 against 5·27 in 1884 and a decennial mean of 2·62. Amongst the rural circles cholera prevailed in each táluka, except Gadag and its petha Mundargi, Ránebennur and Hángal, in which no deaths from this cause were recorded. Amongst the urban circles cholera appeared only in the towns of Dhárwár and Hubli. The other 2 towns were free from it. The highest death-rate (10·72 per 1,000) from cholera in the Collectorate took place in Dhárwár Táluka. The next highest (4·49 per 1,000) was recorded in the town of Dhárwár. In the other tálukás and towns the recorded death-rate was below 2·00 per 1,000. Small-pox prevailed throughout the year to a small extent and caused 429 deaths, or 0·49 per 1,000, against 2,543 or 2·88 in 1884 and a decennial mean of 645 or 0·68. The deaths from fevers were 15,338 against 12,732 in 1884 and a decennial mean of 17,946. The death-rate (17·37 per 1,000) was higher than that for 1884 (14·42), and slightly below the mean of the previous 10 years (18·97).

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the birth and the death-rate from all causes in each táluka and town with that for 1884 and the zilla rate with that of 1884 and the mean of the previous 10 years:—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of Towns and Villages.	Births. Number for 1885.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1884.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1884.
Dhárwár.	Dhárwár Rural Circle...	83,946	423·65	198·06	127	4,187	49·88	43·08	900	10·72	25	·29	1,721	20·51	595	7·09	35	·42	1,028	12·25	4,304	51·28	35·12
	Mugúd Petha ,, ..	55,320	309·82	178·56	70	2,866	51·81	47·63	58	1·04	52	·94	975	17·62	460	8·32	14	·25	280	5·06	1,839	33·23	40·97
	Hubli ,, ..	87,832	562·	156·28	82	4,284	48·77	48·09	108	1·23	5	·06	1,104	12·57	524	5·96	14	·16	545	6·20	2,300	26·18	36·20
	Navalgund ,, ..																						
	Nargund Petha ,, ..																						
	Gadag ,, ..	83,332	698·72	119·16	99	4,531	54·37	49·14	..	..	8	·09	1,252	15·03	533	6·39	29	·35	549	6·59	2,371	28·45	37·31
	Mundargi Petha ,, ..																						
	Karajgi ,, ..	83,216	442·	188·27	130	3,790	45·54	42·40	17	·20	62	·75	1,590	19·10	335	4·03	15	·18	528	6·34	2,547	30·60	32·27
	Bankápur ,, ..	76,554	343·	223·19	142	3,832	50·06	41·12	57	·74	36	·47	1,396	18·24	719	9·39	15	·19	269	3·44	3,456	32·47	29·73
	Ron ,, ..	60,724	370·,	164·12	59	3,117	51·33	44·27	3	·05	1	·01	·84	11·26	433	7·62	21	·36	170	2·82	1,342	22·09	39·36
	Kalghatgi ,, ..	50,760	279·	181·97	105	2,408	47·43	40·10	23	·45	46	·91	1,313	25·86	358	7·64	16	·31	309	6·09	2,095	41·26	33·52
	Ránebennur ,, ..	64,011	404·63	158·20	121	3,260	50·93	48·38	..	..	25	·39	1,165	18·20	389	6·08	18	·28	401	6·26	1,998	31·21	32·26
	Kod ,, ..	80,345	400·	200·89	177	3,668	45·65	43·49	12	·15	51	·63	1,677	20·87	410	5·10	31	·39	409	5·09	2,590	32·23	28·10
	Hángal ,, ..	65,787	299·	220·02	162	2,641	40·14	38·20	..	..	107	1·63	1,475	22·42	483	7·34	18	·28	217	3·29	2,300	34·96	31·35
	Dhárwár Town Circle..	27,191	1·15	23,644·35	1	1,182	42·73	37·35	132	4·49	3	·12	377	12·87	38	1·39	19	·69	477	17·54	1,036	38·10	29·46
	Hubli ,, ..	36,677	1·18	31,082·20	1	1,312	35·77	35·00	54	1·47	8	·22	388	10·58	123	3·35	10	·28	368	10·03	951	25·93	38·99
	Gadag Betgeri ,, ..	17,001	0·28	60,717·86	1	663	39·00	49·29	..	..	..	..	128	7·53	165	9·71	7	·51	102	5·89	402	23·64	38·99
	Ránebennur ,, ..	10,202	0·37	27,572·97	1	480	47·05	50·68	..	..	..	..	93	9·12	34	3·34	3	·29	138	13·52	268	26·27	28·52
	1885 ..	8,82,907	4535·	194·68	1,235	42,201	47·80	..	1,354	1·53	429	·49	15,338	17·37	5,659	6·41	265	·30	5,784	6·55	28,829	32·66	..
	1884 ..					38,342	43·43	..	4,655	5·27	2,543	2·88	12,732	14·42	4,704	5·33	235	·27	5,301	6·00	30,170	34·17	..
	Mean for 10 years, 1875—1884 ..					27,975	29·57	..	2,476	2·62	645	·68	17,946	18·97	4,634	4·90	375	·40	6,334	6·70	32,410	34·26	..

N.B.—The births and deaths of pethas are included in their respective tálukas, as the population of the pethas is not shown separately in the Census Report.

Amongst the rural circles the highest death-rate from all causes (51·28 per 1,000 against 35·12 in 1884), which is also the highest in the Collectorate, took place in Dhárwár Táluka and its petha Mugúd. Cholera caused 900 deaths; the death-rate (10·72 per 1,000) was the highest in the Collectorate. Small-pox caused 25 deaths, or 0·29 per 1,000, whilst the death-rate from fevers was 20·51. From bowel-complaints the death-rate was 7·09 per 1,000, and from injuries the rate (0·42) was the highest in the rural registration circles. From other causes the death-rate (12·25 per 1,000) was also the highest in the rural circles.

The next highest death-rate from all causes (41·26 per 1,000 against 33·52 in 1884) occurred in Kalghatgi Táluka, in which 23 deaths, or 0·45 per 1,000, were ascribed to cholera. Small-pox caused 46 deaths, or 0·91 per 1,000; whilst the death-rate (25·86) from fevers was the highest in the Collectorate. From bowel-complaints and injuries the rates were respectively 7·64 and 0·31, and from other causes 6·09 per 1,000.

The lowest death-rate from all causes (22·09 per 1,000 against 39·36 in 1884) took place in Ron Táluka, in which 3 deaths only from cholera were recorded. The death-rate (0·05) from this cause was the lowest in the Collectorate. Small-pox caused only 1 death, whilst the death-rate (11·26 per 1,000) from fevers was the lowest in the rural circles. From bowel-complaints the death-rate was 7·62 per 1,000 and from injuries 0·35. The rate from other causes (2·80) was the lowest in the Collectorate.

The next lowest death-rate from all causes (26·18 per 1,000 against 36·20 in 1884) occurred in Navalgund Táluka and its petha Nárgund, in which 108 deaths, or 1·23 per 1,000, were ascribed to cholera. Small-pox caused only 5 deaths, or 0·06 per 1,000, whilst the death-rate from fevers was 12·57 per 1,000. From bowel-complaints the death-rate was 5·96 and from injuries 0·16 per 1,000. The death-rate from other causes was 6·20.

No deaths from cholera were reported in the tálukás of Gadag and its petha Mundargi, Ránebennur and Hángal.

The highest death-rate (9·39 per 1,000) from bowel-complaints amongst the rural circles was reported from Bankápur Táluka.

Amongst the urban circles the highest death-rate from all causes (38·10 per 1,000 against 29·46 in 1884) was reported in the town of Dhárwár, in which 122 deaths, or 4·49 per 1,000, were recorded from cholera. Small-pox caused only 3 deaths, or 0·12, whilst the death-rate from fevers was 13·87. The death-rate (1·39 per 1,000) from bowel-complaints was the lowest in the Collectorate. From injuries the death-rates (0·69) and from other causes (17·54 per 1,000) were the highest in the Collectorate.

The lowest death-rate from all causes (23·64 per 1,000 against 38·99 in 1884) occurred in the town of Gadag Betgeri, in which no deaths were reported either from cholera or small-pox. The death-rate from fevers (7·53 per 1,000) was the lowest, and from bowel-complaints (9·71) highest in the Collectorate. From injuries and other causes the rates were respectively 0·51 and 5·89 per 1,000 of population.

In the town of Ránebennur the recorded death-rate from all causes was 26·27 per 1,000 against 28·52 in 1884. Cholera and small-pox caused no deaths, whilst the death-rate from fevers was 9·12 per 1,000. From bowel-complaints the rate was 3·34 and from injuries 0·29. The death-rate (13·52 per 1,000) from other causes is a proof that the deaths were not properly recorded under their proper heads.

In the town of Hubli the death-rate from all causes was 25·93 against 38·99 in 1884. Cholera caused 54 deaths, or 1·47 per 1,000, and small-pox 8 or 0·22. From fevers the death-rate was 10·58 and from bowel-complaints 3·35 per 1,000.

The registration of births receives great attention in the Dhárwár Collectorate, except in the towns of Hubli and Gadag Betgeri.

In the town of Dhárwár great attention seems to have been paid to the vital statistics. The registration of births in the town of Ránebennur is creditably performed; but that of deaths is greatly neglected, and cannot be accepted as correct.

Bijápur.

36. The Collectorate of Bijápur, which was formerly called Kaládgi District, is divided into 8 tálukás and 1 town, and contains 1,141 towns and villages. It covers an area of 5,757 square miles. The population is 638·493, and the average density per square mile amounts to 110·90 persons. The vital statistics of the town of Bijápur, the Sadar station of the Collectorate, were not separately kept for this year as hitherto, as the transfer of the head-quarters of the Kaládgi District from the town of Kaládgi to Bijápur did not take place until 1st March 1885. In future the town of Bijápur will form a new registration circle, and the vital statistics will be separately shown for it. The registration of births is fairly carried out, except in the town of Kaládgi. The recorded birth-rate in each táluka was in excess of that for the previous year, except in the táluka Bádámi, in which the recorded birth-rate (41·58) for this year is the same as that for 1884 (41·73). A remarkable increase in the birth-rate during the year (51·48) over that for 1884 (31·14) took place in Indi Táluka. The recorded birth-rate in the town of Kaládgi was 20·50 per 1,000 against 22·35 in 1884; and this shows that the registration of births in this town is much neglected. The recorded birth-rate throughout this Collectorate was higher than the death-rate. The most notable instance of birth-rates higher than the death-rates are the tálukás of Shindgi and Bádámi. In the former the recorded birth-rate (50·16 per 1,000) was nearly double the reported death-rate (25·72), and in the latter the recorded birth-rate (41·58) was considerably higher than the death-rate (21·79 per 1,000). In the town of Kaládgi the recorded birth-rate (20·50 per 1,000) was higher than the death-rate (13·24), but these rates show unmistakably how greatly neglected is the registration of vital statistics in this town.

The total number of deaths from all causes during 1885 amounted to 16,120, the death-rate being 25·24 per 1,000 against 25·57 in 1884 and the decennial mean of 31·28.

The maximum monthly mortality (1,951) took place in the month of October and the minimum (781) in February.

Cholera was present at the end of 1884 and in 1885: it disappeared in February, but re-appeared in June, and attained its maximum intensity in July. It continued to prevail till December. The number of deaths attributed to it was 405 against 1,070 in 1884 and a decennial mean of 1856, the death-rate being 0·63 per 1,000 against 1·68 in 1884 and a decennial mean of 2·49. Cholera made its appearance in each táluka and town in this Collectorate, although in a very modified form. The highest death-rate in the Collectorate (1·43 per 1,000), which is nearly the same as that in Bijápur Táluka (1·18), took place in Bádámi Táluka. The next highest (0·91 per 1,000) was in Bágalkot Táluka. In Muddebihál Táluka the rate was 0·72. The lowest death-rate (0·01 per 1,000) in the Collectorate was in Sindgi Táluka. In the other tálukás and in the town of Kaládgi the rate was below 0·40. Small-pox prevailed to a slight extent till September, and caused 59 deaths, or 0·09 per 1,000, against 1,800 or 2·82 in 1884 and a decennial mean of 361 or 0·48. The deaths from fevers were 10,423 against 8,912 in 1884 and a decennial mean of 13,814: the death-rate (16·32 per 1,000) was accordingly below the decennial mean (18·54), and higher than the rate in 1884 (13·96).

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka and town with that of 1884 and the zilla rate with that of 1884 and the mean of the prervious 10years:—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of Towns and Villages.	Births.			Deaths.																Ratio of Deaths from all Causes per 1,000 of Population in 1884.
									Cholera.		Small-pox.		Fevers.		Bowel-complaints.		Injuries.		Other Causes.		All Causes.		
						Number for 1885.	Ratio per 1,000 of Population.	Ratio per 1,000 of Population in 1884.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	
Bijápur.	Hungund Rural Circle	80·037	518·	154·51	160	3,653	45·64	43·52	21	·26	..	..	1,227	15·33	83	1·04	24	0·30	569	7·11	1,924	24·04	22·[illegible]
	Muddebihál "	65·024	564·	115·29	149	2,056	45·31	40·46	47	·72	..	..	1,220	18·76	66	1·01	12	·18	298	4·58	1,643	25·26	22·[illegible]
	Sindgi "	72·650	812·	89·47	141	3,614	56·16	42·98	1	·01	4	·06	1,166	16·05	264	3·63	9	·12	235	3·02	1,689	23·72	26·[illegible]
	Bágevádi "	86·743	764·	113·54	120	3,736	43·07	37·47	32	·37	4	·05	1,464	16·88	326	3·76	22	·25	881	6·69	2,429	28·00	26·[illegible]
	Bijápur "	76·806	869·	88·49	92	3,173	41·26	35·01	91	1·18	33	·43	1,233	16·03	440	5·72	27	·35	384	4·34	2,158	28·06	23·[illegible]
	Bágalkot "	89·139	682·88	130·52	162	3,844	43·13	40·63	81	·91	1	·01	1,281	14·37	429	4·71	18	·20	546	6·13	2,347	26·33	31·[illegible]
	Bádámi "	59·047	676·	131·73	195	3,703	41·68	41·73	126	1·43	3	·03	1,258	14·13	189	2·12	36	·40	328	3·68	1,940	21·79	31·[illegible]
	Indi "	71·940	871·	82·59	121	3·718	51·68	31·14	4	·06	14	·19	1,335	18·56	38	·53	11	·15	315	4·38	1,717	23·87	17·[illegible]
	Kaládgi Town Circle	7·024	0·12	58·533·33	1	144	20·50	22·35	2	·28	..	..	39	5·55	36	5·12	..	..	16	2·28	93	13·24	19·[illegible]
	1885	638·493	57·67	110·90	1,141	28,571	44·75	..	405	·63	59	·09	10,423	16·32	1,602	2·82	159	·25	3,272	5·12	16,120	25·24	..
	1884				..	24,847	38·91	..	1,070	1·68	1,800	2·82	8,912	13·96	1,697	2·50	195	·36	2,753	4·31	16,327	25·57	..
	Mean for 10 years, 1875—1884				..	15,616	20·96	..	1,856	2·49	361	·48	13,814	18·54	1,569	2·11	316	·42	5,400	7·21	23,316	31·29	..

Amongst the rural registration circles the highest death-rate from all causes (28·06 per 1,000 against 23·37 in 1884), which is also the highest in the Collectorate, and which was also the same as that of the táluka Bágevádi (28·00 against 26·70 in 1884), took place in Bijápur Táluka. Cholera caused 91 deaths, or 1·18 per 1,000 of population. From small-pox there were 33 deaths; the death-rate (0·43 per 1,000) was the highest in the Collectorate. The death-rate from fevers was 16·03 per 1,000, whilst that from bowel-complaints (5·72) was the highest in the Collectorate. From injuries the death-rate was 0·35 and from other causes 4·34 per 1,000.

In Bágevádi Táluka 32 deaths, or 0·37 per 1,000, were ascribed to cholera and 4 or 0·05 to small-pox. The death-rate from fevers was 16·88 and from bowel-complaints 3·76 per 1,000. From injuries and other causes the rates were respectively 0·25 and 6·69.

The highest death-rate from fevers (18·80), which was nearly the same as that of the táluka Muddebihál (18·76) and Indi (18·56), occurred in Sindgi Táluka.

The lowest death-rate from all causes (21·79 per 1,000 against 31·71 in 1884) occurred in Bádámi Táluka, in which 126 deaths were ascribed to cholera; the death-rate (1·43) was the highest in the Collectorate. Small-pox caused only 3 deaths, or 0·03, whilst the death-rate from fevers (14·13) was the lowest in the rural registration circles. From bowel-complaints the rate was 2·12 and from injuries 0·40 per 1,000, which was the highest in the Collectorate. The death-rate from other causes was 3·68.

The next lowest death-rate from all causes (23·87 per 1,000 against 17·85 in 1884) took place in Indi Táluka, in which 4 deaths, or 0·06 per 1,000, were attributed to cholera. Small-pox caused 14 deaths or 0·19, whilst the death-rate from fevers was 18·56 per 1,000. The death-rate from bowel-complaints (0·53) was the lowest in the Collectorate. From injuries the rate was 0·15 and from other causes 4·38 per 1,000.

There were no deaths recorded from small-pox in the tálukás Hungund and Muddebihál.

In the town of Kaládgi the death-rate from all causes (13·24 per 1,000 against 19·08 in 1884) was the lowest in the Collectorate. From cholera there were only 2 deaths, or 0·28, and no death from small-pox. The death-rate from fevers (5·55 per 1,000) was the lowest in the Collectorate. From bowel-complaints the rate was 5·12, and from injuries there were no deaths recorded. The death-rate from other causes (2·28 per 1,000) was the lowest in the Collectorate.

Amongst the rural registration circles the registration of births appears to be well attended to, but the registration of deaths in them is far from being accurate.

In the town of Kaládgi, as before noticed, the registration of vital statistics is much neglected.

Kánara.

37. The Collectorate of Kánara is divided into 7 tálukás and 4 pethas, forming 11 rural circles and 2 town circles. It contains 1,109 towns and villages, and covers an area of 3,911 square miles. The population is 421,840, and the average density per square mile amounts to 107·85 persons. The registration of births in this Collectorate is much neglected, as sufficient attention is not paid to it. The birth-rate in each táluka and town in this Collectorate is far below the standard (40 per 1,000). Amongst the rural registration circles the birth-rate is in excess of that for the previous year in the tálukás of Kumta, Honávar, Bhutkal Petha, Mundgod Petha and Haliyál and its petha Supa. In the tálukás Sirsi and Siddápur the birth-rates (23·76 and 31·27 per 1,000) are nearly the same as those for 1884 (23·99 and 31·41 respectively). But in Kárwár Táluka the birth-rate was 32·93 per 1,000 against 36·20 in 1884, in Ankola Petha 29·78 against 34·34, and in Yellápur 22·12 against 25·87 per 1,000 in 1884. In the town of Kumta the birth (35·00) was in excess of that for 1884 (31·14 per 1,000), but at Kárwár it was 33·21 per 1,000 against 35·03 in 1884. Amongst the rural registration circles the recorded birth-rates in Kárwár, Kumta, Honávar and Siddápur tálukás and Bhutkal Petha are higher than the death-rates. In other tálukás and pethas the birth-rates are lower than the death-rates. Among the urban circles the towns of Kárwár and Kumta show birth-rates (33·21 and 35·00 per 1,000) higher than the death-rates (20·27 and 28·41).

The total number of deaths from all causes in 1885 was 13,014, the death-rate being 30·85 per 1,000 against 30·01 in 1884 and a decennial mean of 33·08.

The maximum monthly mortality (1,192) took place in March and the minimum (937) in September.

Cholera was present at the end of 1884, and in 1885 it disappeared in February, but re-appeared in March, and attained its maximum intensity in May. It disappeared in August, but re-appeared in December. Three-hundred and thirty-six deaths were attributed to it, against 108 in 1884 and a decennial mean of 397, the death-rate being 0·80 per 1,000 against 0·26 in 1884 and a decennial mean of 0·97. It appeared in the tálukás of Kárwár, Sirsi, Halyál and its petha Supa and petha Mundgod. The other tálukás, pethas and towns were free from it. The highest death-rate (4·56 per 1,000) in the Collectorate took place in Haliyál Táluka and its petha Supa. The next highest (2·94) occurred in Mundgod Petha. The death-rate 0·12 and 0·02 per 1,000 were in Kárwár and Sirsi tálukás respectively. Small-pox prevailed throughout the year to a slight extent and caused

263 deaths, or 0·62 per 1,000, against 1,306 or 3·10 in 1884 and the decennial mean of 222 or 0·54. The total deaths from fevers was 7,376 against 6,827 in 1884, and the decennial mean was 7,767. The death-rate from fevers (17·49) was below the decennial mean (19·05) and higher than the rate in 1884 (16·18).

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka and town with that for 1884 and the zilla-rate with that of 1884 and the mean of the previous 10 years:—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of Towns and Villages.	Births. Number for 1885.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1884.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1884.
Kánara.	Kárwár Rural Circle	33,981	269·23	126·22	51	1,119	32·93	36·20	4	0·12	1	·03	519	15·27	20	0·59	21	·62	286	8·41	851	25·04	20·98
	Kumta „ ..	48,129	222·65	216·16	116	1,755	36·46	32·62	..	..	33	·68	703	14·61	112	2·33	39	·81	514	10·68	1,401	29·11	35·74
	Ankola Petha „ ..	34,189	367·	93·16	88	1,018	29·78	34·34	..	..	..	..	625	18·28	47	1·38	23	·67	424	12·40	1,119	32·73	26·14
	Honávar „ ..	54,199	446·	191·98	99	1,943	35·85	33·99	..	..	19	·35	785	14·48	92	1·72	35	·65	494	9·11	1,425	26·31	32·50
	Bhutkal Petha „ ..	31,426			31	885	28·16	24·66	..	..	29	·92	356	11·33	58	1·85	13	·41	228	7·26	684	21·77	29·61
	Sirsi „ ..	62,400	779·	80·10	258	1,484	23·76	23·99	1	0·02	45	·72	1,296	20·77	68	1·09	23	·40	697	11·17	2,130	34·23	31·30
	Siddápur „ ..	35,658	239·	149·20	99	1,115	31·27	31·41	..	..	51	1·43	621	17·42	96	2·69	24	·67	296	8·30	1,088	30·51	29·25
	Yellápur „ ..	18,629	589·	61·65	78	412	22·12	25·87	..	..	8	·43	442	23·73	24	1·29	13	·69	166	8·91	653	35·05	30·23
	Mundgod Petha „ ..	17,685			76	504	28·50	23·92	52	2·94	20	1·13	496	28·05	60	3·39	9	·51	145	8·19	782	44·21	39·07
	Haliyál „ ..	61,154	989·	62·40	216	1,532	25·05	22·91	279	4·56	51	·83	1,295	21·18	213	3·48	24	·39	432	7·07	2,294	37·51	30·09
	Supa Petha „ ..																						18·31
	Kárwár Town Circle.	13,761	11·77	1,169·16	1	457	33·21	35·03	..	..	4	·29	133	9·66	14	1·02	4	·29	124	9·01	279	20·27	39·04
	Kumta „ ..	10,629	7·35	1,446·12	1	372	35·00	31·14	..	..	2	·19	105	9·88	36	3·39	6	·57	153	14·38	302	28·41	
	1885 ..	421,840	3,911	107·85	1,109	12,596	29·86	..	336	·80	263	·62	7,376	17·49	846	1·99	240	·57	3,959	9·38	13,014	30·85	..
					1884 ..	12,327	29·22	..	108	·26	1,306	3·10	6,827	16·18	762	1·81	192	·45	3,465	8·21	12,660	30·01	..
	Mean for 10 years, 1875—1884 ..					11,767	28·36	..	397	·97	222	·54	7,767	19·05	1,134	2·78	224	·55	3,745	9·18	13,489	33·08	..

N. B.—As the population of Supa Petha is included in the Haliyál Táluka in the Census Report, the births and deaths are included in it. The area in square miles of pethas are included in their respective tálukás, as they are not separately shown in the Census Report.

Amongst the rural registration circles and in the Collectorate the highest death-rate from all causes (44·21 per 1,000 against 39·07) in 1884 took place in Mundgod Petha, in which 52 deaths, or 2·94 per 1,000, were ascribed to cholera. Small-pox caused 20 deaths, or 1·13 per 1,000; whilst the death-rate (28·05 per 1,000) from fevers was the highest in the Collectorate. From bowel-complaints the death-rate was 3·39 and from injuries 0·51. The rate from other causes was 8·19 per 1,000.

The next highest death-rate from all causes (35·05 per 1,000 against 30·33 in 1884) occurred in Yellápur Táluka, in which no deaths from cholera were reported. Small-pox caused 8 deaths, or 0·43 per 1,000, whilst the death-rate from fevers was 23·73. The rates from bowel-complaints and injuries were respectively 1·29 and 0·69, and from other causes 8·91 per 1,000.

The highest death-rates from cholera (4·56) and from bowel-complaints (3·48) in the Collectorate were reported from Haliyál Táluka and its petha Supa.

The lowest death-rate from all causes (21·77 per 1,000 against 28·61 in 1884) took place in Bhutkal Petha, in which no death from cholera was reported. Small-pox caused 29 deaths, or 0·92 per 1,000, whilst the death-rate from fevers (11·33) was the lowest in the rural circles. From bowel-complaints the death-rate was 1·85 and from injuries 0·41. The rate from other causes was 7·26 per 1,000.

The next lowest death-rate from all causes (25·04 per 1,000 against 20·98 in 1884) occurred in Kárwár Táluka, in which 4 deaths, or 0·12 per 1,000, were reported from cholera. Small-pox caused only 1 death, whilst the death-rate from fevers was 15·27. The rates from bowel-complaints and injuries were respectively 0·59 and 0·62; the former was the lowest in the Collectorate. From other causes the death-rate was 8·41.

Amongst the urban circles the death-rate from all causes (28·41 per 1,000 against 39·04 in 1884) was reported in the town of Kumta, in which no death

from cholera was reported and only 2 from small-pox. The death-rate from fevers was 9·88 and from bowel-complaints 3·39. From injuries the rate was 0·57. The death-rate from other causes (14·38) was the highest in the Collectorate.

The reported death-rate from all causes (20·27 per 1,000 against 18·31 in 1884) in the town of Kárwár was the lowest in the Collectorate. There were no deaths from cholera, but 4 from small-pox, the rate being 0·29 per 1,000. The death-rate from fevers (9·66 per 1,000) was the lowest in the Collectorate. From bowel-complaints the death-rate was 1·02 and from injuries 0·29 per 1,000, which was the lowest in the Collectorate. The rate from other causes was 9·01.

The registration of births in this Collectorate falls considerably below the standard, and greater attention should be paid to this subject.

The registration of deaths in the tálukás of Kárwár, Kumta, Honávar and petha Bhutkal appears to have been much neglected. In other tálukás it is only fairly carried out.

In the towns of Kárwár and Kumta the registration of deaths is very much neglected.

EASTERN GUJARA'T REGISTRATION DISTRICT.

COLLECTORATES.

1. Surat.	3. Kaira.	5. Ahmedabad.
2. Broach.	4. Panch Maháls.	

Surat.

38. The Collectorate of Surat is divided into 8 rural and 2 town circles. It contains 782 towns and villages, and covers an area of 1,662 square miles. The population is 614,198, and the average density per square mile amounts to 369·55 persons. Although the recorded birth-rate during 1885 amongst the rural registration circles is in excess of that for 1884 in each táluka, yet in none, except in the táluka of Olpád, does it amount to the standard (40 per 1,000). Amongst the urban circles the recorded birth-rate in the town of Surat (34·77 per 1,000) is the same as that for 1884 (34·76), but at Bulsár it was only 16·55 per 1,000 against 22·46 in 1884. The recorded birth-rate in each táluka and town in the Collectorate is higher than the recorded death-rate. In Olpád and Chikhli tálukás the birth-rate is considerably higher than the death-rate. As in the former, it was 43·63 per 1,000 with a death-rate of 28·61, and in the latter these rates were respectively 38·82 and 27·50. In Mándvi Táluka the birth-rate (38·73 per 1,000) was also much higher than the death-rate (28·03).

The total number of deaths from all causes in 1885 amounted to 18,052 against 17,039 in 1884 and a decennial mean of 16,866. The death-rate being 29·39 per 1,000 against 27·74 in 1884 and a decennial mean of 27·65.

The maximum monthly mortality (1,683) took place in November and the minimum (1,283) in July.

Cholera commenced in February, attained its maximum intensity in June, and disappeared in December after causing 646 deaths, or 1·05 per 1,000, against 255 or 0·41 in 1884 and a decennial mean of 892 or 1·46. Cholera made its appearance in each táluka and town, except Párdi Táluka and the town of Bulsár. The highest recorded death-rate from cholera (2·86 per 1,000) in the Collectorate, which is nearly the same as that in Chorási Táluka (2·44), took place in the town of Surat. The next highest death-rate (1·32 per 1,000) occurred in Olpád Táluka. In the other tálukás of the Collectorate the rate was below 1·00 per 1,000. There was only 1 death from small-pox throughout the year in this Collectorate, which took place in March in the town of Surat, against 63 in 1884 and a decennial mean of 447. The death-rate being 0·00 against 0·10 in 1884 and a decennial mean of 0·73. The total number of deaths from fevers was 13,676 against 13,296 in 1884, and the mean for the previous 10 years was 12,028. The death-rate (22·27 per 1,000) was above the decennial mean (19·72), and also in 1884 (21·65).

The following statement shows the number of births and deaths by causes and their ratio per 1,000 in each táluka and town in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka and town

with that for 1884 and the zilla rate with that of 1884 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of Towns and Villages.	Births. Number for 1885.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1884.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1884.
Surat.	Olpád Rural Circle.	62,049	323	192·16	120	2,707	43·63	41·66	82	1·32	..	..	1,210	19·50	281	4·53	16	0·26	186	3·00	17,75	28·61	31·70
	Mándvi ,, ..	50,810	280	181·46	141	1,968	38·73	36·78	8	0·16	..	..	1,363	26·83	23	0·49	25	0·49	3	0·06	1,424	28·03	26·71
	Chorási ,, ..	44,764	107	418·35	86	1,719	38·40	34·18	109	2·44	..	..	820	18·32	335	7·48	22	0·49	176	3·93	1,463	32·66	29·96
	Bárdoli ,, ..	76,100	222	342·79	124	2,928	38·48	35·66	58	0·76	..	..	2,121	27·87	131	1·72	30	0·39	35	0·46	2,375	31·21	26·7[illegible]
	Jalálpor ,, ..	74,016	189	391·62	91	2,874	38·83	34·45	50	0·67	..	..	1,778	24·02	407	5·50	37	0·50	8	0·11	2,280	30·80	29.[illegible]
	Chikhli ,, ..	60,147	167	360·16	62	2,335	38·82	35·26	20	0·33	..	..	1,396	23·21	152	2·53	26	0·43	60	1·00	1,654	27·50	27.[illegible]
	Bulsár ,, ..	67,478	205·50	328·36	94	2,666	39·51	35·82	5	0·07	..	..	1,792	26·56	306	4·53	29	0·43	68	1·01	2,200	32·60	31.[illegible]
	Párdi ,, ..	55,761	163	342·09	82	1,796	32·21	30·52	..	..	..	..	1,112	19·94	163	2·92	28	0·50	43	0·77	1,346	24·14	25·05
	Surat Town ,, ..	199,344	3	36,614·66	1	3,819	34·77	34·76	314	2·86	1	..	2,017	18·36	50	0·45	42	0·38	974	8·88	3,398	30·93	26·37
	Bulsár ,, ..	13,229	2·50	5,291·60	1	219	16·55	22·46	..	..	..	..	67	5·06	31	2·34	3	0·23	37	2·80	138	10·43	10·89
	1885 ..	614,198	1,662	369·55	782	23,031	37·50	..	646	1·05	1	..	13,676	22·27	1,881	3·06	258	0·42	1,590	2·59	18,052	29·39	..
	1884 ..					21,455	34·93	..	255	·41	63	·10	13,296	21·65	1,811	2·95	293	·47	1,321	2·16	17,039	27·74	..
	Mean for 10 years, 1875—1884 ..					17,446	28·60	..	892	1·46	447	·73	12,022	19·72	1,515	2·48	267	·44	1,717	2·81	16,856	27·65	..

Amongst the rural circles the highest death-rate from all causes (32·66 per 1,000 against 29·96 in 1884), which is nearly the same as that of Bulsár Táluka (32·60 against 31·61 in 1884) and is also the highest in the Collectorate, took place in Chorási Táluka, in which cholera carried off 109 persons. The death-rate (2·44 per 1,000) was the highest in the rural circles. Small-pox caused no death, whilst the death-rate from fevers (18·32) was the lowest in the rural circles. The death-rate from bowel-complaints (7·48) was the highest in the Collectorate. The death-rate from injuries and other causes were respectively 0·49 and 3·93 per 1,000.

In Bulsár Táluka 5 deaths were attributed to cholera; the death-rate (0·07) was the lowest in the Collectorate. Small-pox caused no death, whilst the death-rate from fevers was 26·56 per 1,000. From bowel-complaints the rate was 4·53 and from injuries 0·43 per 1,000. The death-rate from other causes was 1·01.

The recorded death-rate from fevers (27·87 per 1,000) in Bárdoli Táluka was the highest in the Collectorate.

The lowest death-rate from all causes (24·14 per 1,000 against 25·05 in 1884) occurred in Párdi Táluka, in which no deaths from cholera and small-pox were recorded. The death-rate from fevers was 19·94 and from bowel-complaints 2·92. From injuries and other causes the rates were respectively 0·50 and 0·77.

Amongst the urban circles the death-rate from all causes (30·93 per 1,000 against 26·37 in 1884) took place in the town of Surat, in which cholera carried off 314 persons; the death-rate (2·86 per 1,000) was the highest in the Collectorate. Small-pox caused only 1 death, whilst the death-rate from fevers was 18·36. The death-rate from bowel-complaints (0·45) was the lowest in the Collectorate. From injuries the rate was 0·38 and from other causes 8·88, which is the highest in the Collectorate.

In the town of Bulsár the recorded death-rate from all causes (10·43 per 1,000 against 10·89 in 1884) was the lowest in the Collectorate. There were no deaths from cholera or small-pox, whilst the death-rate from fevers (5·06) was the lowest in the Collectorate. From bowel-complaints and injuries the rates were respectively 2·34 and 0·23, and from other causes 2·80 per 1,000.

The recorded birth and death-rates in the town of Bulsár afford a proof of how extremely defective the registration of vital statistics is in this town.

The registration of births is fairly carried out in some of the tálukás, but more attention to it is required in all, except in Olpád, where it is above the standard; but the registration of deaths cannot be accepted as correct in any of the circles.

Broach.

39. The Collectorate of Bróach is divided into 5 tálukas and 1 petha, forming 6 rural circles and 2 town circles. It contains 405 towns and villages, and covers an area of 1,453 square miles. The population is 326,930, and the average density per square mile

amounts to 225 persons. The registration of births in the rural registration circles was somewhat better during 1885 than in 1884. In each táluka it is below the standard (40 per 1,000). In the town of Jambusar, as in 1884, the registration of births evidently received much attention, the birth-rate 43·38 per 1,000 being higher than in any other circle in this Collectorate. The low birth-rate (31·97 per 1,000 against 30·58 in 1884) in the town of Broach is a proof that the registration of births is very much neglected in this town, and that many births must have escaped registration. The recorded birth-rate in 1885 is in excess of that for 1884 in the tálukás of Broach, Vágra, A'mod and Anklesvar and its petha Hánsot. In Jambusar the recorded birth-rate (38·72) is the same as it was in 1884 (38·25 per 1,000). Amongst the rural circles the birth-rate was higher than the death-rate in Jambusar and Anklesvar tálukás and its petha Hánsot. In the former the birth-rate was 38·72 per 1,000 and the recorded death-rate 36·32, and in the latter 39·51 and 34·53 respectively. In the Broach, Vágra and A'mod tálukás the birth was below the death-rate. In Broach the birth-rate was 38·99 and the death-rate 39·31. In Vágra and A'mod the birth-rate was respectively 38·85 and 36·78 and the death-rate 41·97 and 41·52 per 1,000. In the town circles the birth-rate is below the death-rate in the towns of Broach and Jambusar. In the former the birth-rate was 31·97 per 1,000 and the death-rate 32·75, and in the latter they were respectively 43·38 and 49·39 per 1,000.

The total number of deaths in 1885 from all causes was 12,392, the death-rate being 37·90 per 1,000 of population against 35·15 in 1884 and a decennial mean of 30·38.

The maximum monthly mortality (1,277) took place in September and the minimum (863) in May.

Cholera commenced in March, attained its maximum intensity in June, and disappeared in November after causing 210 deaths, against 607 in 1884 and a decennial mean of 377. The death-rate being 0·64 per 1,000 against 1·85 in 1884 and a decennial mean of 1·11. Cholera appeared to a slight extent in each táluka and town in the Collectorate, except the town of Jambusar. The highest death-rate (2·62 per 1,000) in the Collectorate, took place in A'mod Táluka and the lowest (0·09) in Jambusar. In other tálukás the death-rate from this cause was below 1·00 per 1,000. The death-rate from cholera in the town of Broach was 0·59 per 1,000. In the town of Jambusar no death was recorded from it. Small-pox caused only 1 death throughout the year, which occurred in Vágra Táluka in July, the death-rate being 0·00 against 0·03 in 1884 and a decennial mean of 0·40. From fevers the deaths were 10,576 against 9,388 in 1884 and a decennial mean of 8,510, the death-rate being 32·35 per 1,000 against 28·72 in 1884 and a decennial mean of 24·96.

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka and town with that for 1884 and the zilla rate with that of 1884 and the mean of the previous 10 years:—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of Towns and Villages.	Births. Number for 1885.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1884.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1884.
Broach.	Broach Rural Circle	73,280	300·83	244·01	104	2,857	38·99	32·79	55	0·75	..	..	2,534	34·17	131	1·79	19	0·26	172	2·35	2,881	39·31	36·95
	Vágra " ..	38,902	308	110·07	69	1,517	38·85	33·86	9	0·27	1	0·03	1,369	40·09	30	0·88	9	0·27	15	0·44	1,423	41·97	38·10
	A'mod " ..	39,641	176	225·23	48	1,458	36·78	34·03	104	2·62	..	..	1,402	35·37	48	1·21	18	0·46	76	1·92	1,648	41·52	39·72
	Jambusar " ..	66,298	372·46	177·99	82	2,567	38·72	38·25	6	0·09	..	..	2,264	34·15	84	1·27	28	0·42	26	0·39	2,408	36·32	33·76
	Anklesvar " ..	65,054	204	221·27	100	2,570	39·51	36·60	14	0·22	..	..	1,933	29·71	67	1·03	30	0·46	202	3·11	2,246	34·53	34·29
	Hánsot Petha " ..																						
	Broach Town Circle	37,281	1·68	22,191·07	1	1,192	31·97	30·50	22	0·59	..	..	585	21·74	4	0·11	24	0·64	286	7·67	1,221	32·75	36·96
	Jambusar " ..	11,479	0·54	21,257·47	1	498	43·38	43·56	..	..	..	..	229	19·95	332	28·92	4	0·35	2	0·17	567	49·39	43·21
	1885 ..	326,930	1,453	225·00	405	12,450	38·11	..	210	0·64	1	..	10,576	32·35	696	2·13	130	0·40	779	2·38	12,392	37·90	..
	1884 ..					11,454	35·03	..	607	1·85	11	·03	9,388	28·72	622	1·90	114	·35	751	2·30	11,493	35·15	.
	Mean for 10 years, 1876–1884 ..					7,676	22·51	..	377	1·11	138	·40	8,510	24·96	587	1·72	128	·37	625	1·82	10,360	30·38	.

N.B.—The births and deaths in Hánsot Petha are included in Anklesvar Táluka, as the population of each is not separately shown in the Census Report.

Amongst the rural circles the highest death-rate from all causes (41·97 per 1,000 of population against 36·10 in 1884), which is nearly the same as that of A'mod Táluka (41·52 against 30·72 in 1884), took place in Vágra Táluka, in which 9 deaths, or 0·27 per 1,000, were attributed to cholera. Small-pox caused only 1 death, whilst the death-rate from fevers (40·09 per 1,000) was the highest in the Collectorate. The death-rate from bowel-complaints (0·88) was the lowest in the rural circles. From injuries the death-rate was 0·27 and from other causes 0·44 per 1,000.

In A'mod Táluka there were 104 deaths from cholera; the death-rate (2·62) was the highest in the Collectorate. The death-rate from fevers (35·37 per 1,000) was the next highest in the Collectorate. From bowel-complaints and injuries the rates were respectively 1·21 and 0·40, and from other causes 1·92 per 1,000.

The lowest death-rate from all causes (34·53 per 1,000 of population against 34·29 in 1884) occurred in Anklesvar Táluka and its petha Hánsot, in which cholera carried off 14 persons, or 0·22 per 1,000. Small-pox caused no death, whilst the death-rate from fevers (29·71 per 1,000) was the lowest in the rural circles. From bowel-complaints the death-rate was 1·03, and from injuries 0·46 per 1,000. The death-rate from other causes (3·11) was the highest in the rural circles.

Amongst the urban circles the death-rate from all causes (49·39 per 1,000 of population against 43·21 in 1884), which is the highest in the Collectorate, took place in the town of Jambusar. There were no deaths recorded from cholera or small-pox, whilst the death-rate from fevers (19·95 per 1,000) was the lowest in the Collectorate. The remarkably high death-rate from bowel-complaints (28·92 per 1,000) in this town leads to a suspicion that it is due to an impure water-supply. From injuries and other causes the death-rates were 0·35 and 0·17 per 1,000 respectively.

The death-rate from all causes (32·75 per 1,000 against 36·96 in 1884) in the town of Broach was the lowest in the Collectorate. Cholera carried off 22 persons, or 0·59 per 1,000, in this town. Small-pox caused no death, whilst the death-rate from fevers (23·74 per 1,000) was the next lowest in the Collectorate. The death-rate from bowel-complaints (0·11) was the lowest in the Collectorate. From injuries and other causes the rates (0·64 and 7·67 per 1,000 respectively) were the highest in the Collectorate.

The registration of births in this Collectorate, and particularly in the town of Broach, requires the special attention of the authorities; but, on the whole, the registration of vital statistics in the Collectorate is fairly carried out.

Kaira.

40. The Collectorate of Kaira is divided into 7 rural and 4 town circles. It contains 581 towns and villages, and covers an area of 1,609 square miles. The population is 804,800, and the average density per square mile amounts to 500·18 persons. The registration of births amongst the rural registration circles appears to be fairly carried out in each táluka, as the recorded birth-rate in it was not far short of the standard (40 per 1,000). Amongst the urban circles the registration of births is greatly neglected: the recorded birth-rate in each of the towns being far below the standard. The recorded birth-rate in 1885 amongst the rural circles is slightly in excess of that for 1884 in each táluka, except Borsad, in which the birth-rate (41·13 per 1,000) is nearly the same as that for 1884 (41·38). Amongst the urban circles the recorded birth-rate (34·48 per 1,000) in the town of Nadiád alone exceeds that for 1884 (31·59); but in the town of Kaira the recorded birth-rate is only 27·69 against 31·80 per 1,000 in 1884, at Borsad 19·30 against 21·42, and at Kapadvanj 28·39 against 33·17 per 1,000 in 1884. Amongst the rural registration circles the recorded birth-rate was higher than the death-rate in each táluka, except Mehmadabad, in which the recorded birth-rate (38·61 per 1,000) was nearly the same as that of death-rate (38·24). Amongst the urban circles the birth-rate in each of the towns was below the death-rates. In the towns of Kaira and Nadiád the birth-rates were considerably below the death-rates. In the former the birth-rate was 27·69 per 1,000 and the death-rate 42·40, and in the latter the respective rates were 34·48 and 49·21. In the town of Kapadvanj the birth-rate (28·39) was much below the death-rate (38·77 per 1,000),

and in Borsad the birth-rate (19·30) was slightly below the recorded death-rate (22·98).

The total number of deaths from all causes in 1885 was 27,728, the death-rate being 34·45 per 1,000 of population against 28·60 in 1884 and a decennial mean of 28·39.

The maximum monthly mortality (3,066) took place in August, and the minimum (1,605) in February.

Cholera commenced in February and disappeared in March, but re-appeared in April, attained its maximum intensity in August, and disappeared in December after causing 393 deaths, or 0·49 per 1,000, against 396 or 0·49 in 1884 and a decennial mean of 636 or 0·80. Cholera made its appearance in this Collectorate in each táluka and town except Kapadvanj: the highest death-rate (1·66 per 1,000) in the Collectorate, and which is nearly the same as that of Borsad Táluka (1·04), took place in the town of Kaira, and the lowest (0·10 per 1,000) in Mehmadabad Táluka. In other tálukás and towns the death-rate was below 1 per 1,000. The táluka and town of Kapadvanj were free from it, and no death was recorded from cholera in them. Small-pox prevailed till August to a slight extent, and caused 129 deaths against 138 in 1884 and a decennial mean of 206. The death-rate being 0·16 per 1,000 against 0·17 in 1884 and a decennial mean of 0·26. There were 22,257 deaths from fevers, against 18,250 in 1884 and a decennial mean of 18,138. The death-rate from fevers (27·66) was accordingly above the rate in 1884 (22·69) and a decennial mean (22·91).

The following statement shows the number of births and deaths by causes and their ratios per 1,000 of population in each táluka and town in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka and town with that for 1884 and the zilla rate with that of 1884 and the mean of the previous 10 years:—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of Towns and Villages.	Births.			Deaths.																Ratio of Deaths from all Causes per 1,000 of Population in 1884.
									Cholera.		Small-pox.		Fevers.		Bowel-complaints.		Injuries.		Other Causes.		All Causes.				
						Number for 1885.	Ratio per 1,000 of Population.	Ratio per 1,000 of Population in 1884.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.			
Kaira.	Mehmadabad R. Circle ..	76,296	173·72	439.19	59	2,948	38·61	37·88	8	0·10	7	0·09	2,436	31·93	313	4·10	19	0·25	135	1·77	2,918	38·24			32·09
	Nadiád " ..	1,33,932	224·67	598·88	92	5,274	39·37	36·12	116	0·87	65	0·49	3,690	27·54	558	4·16	50	0·37	289	2·16	4,768	35·59			28·12
	Borsad " ..	1,31,093	217·81	601·87	89	5,392	41·13	41·38	136	1·04	5	0·04	3,201	24·42	818	6·24	62	0·47	80	0·61	4,302	32·82			26·99
	A'nand " ..	1,54,118	243·	634·13	74	6,218	40·35	39·39	33	0·21	38	0·25	3,743	24·29	651	4·22	79	0·51	428	2·78	4,972	32·26			28·18
	Thásra " ..	84,866	253·	335·44	97	3,386	39·90	38·37	40	0·47	..	..	2,331	27·47	179	2·11	34	0·40	120	1·41	2,704	31·86			27·43
	Kapadvanj " ..	78,982	279·77	280·88	85	3,078	39·17	35·52	..	..	1	0·01	2,089	26·58	242	3·08	30	0·38	125	1·59	2,487	31.65			24·55
	Mátar " ..	78,279	217·	360·73	81	3,021	38·59	37·26	13	0·17	2	0·03	2,823	32·23	222	2·84	27	0·34	20	0·25	2,907	35·86			32·42
	Kaira Town Circle ..	12,640	0·28	45,142·86	1	356	27·69	31·80	21	1·66	3	0·24	349	27·61	100	7·91	7	0·55	56	4·43	536	42·40			30·46
	Nadiád " ..	28,304	0·33	85,769·70	1	976	34·48	31·59	17	0·60	..	..	1,196	42·25	77	2·72	13	0·46	90	3·18	1,393	49·21			30·70
	Borsad " ..	12,228	0·19	64,357·89	1	2·6	19·30	21·42	9	0·74	8	0·65	254	20·77	1	0·08	9	0·74	..	..	281	22·98			22·49
	Kapadvanj " ..	14,442	6·23	62,791·30	1	410	28·39	33·17	..	..	..	..	445	30·81	44	3·05	10	0·69	61	4·22	560	38·77			41·13
	1885 ..	8,04,800	1,609	500·18	561	31,287	38·88	..	393	0·49	129	0·16	22,257	27·66	3,205	3·98	340	0·42	1,404	1·74	27,728	34·45			..
	1884 ..					30,228	37·56	..	396	·49	138	·17	18,250	22·69	2,671	3·32	317	·39	1,241	1·54	23,023	28·60			..
	Mean for 10 years, 1875—1884 ..					22,754	28·75	..	636	·80	206	·26	18,138	22·91	2,085	2·63	330	0·42	1,081	1·37	22,476	28·39			..

Amongst the rural circles the highest death-rate from all causes (38·24 per 1,000 against 32·09 in 1884) took place in Mehmadabad Táluka, in which cholera carried off only 8 persons. The death-rate (0·10) from this cause was the lowest in the Collectorate. Small-pox caused 7 deaths or 0·09, whilst the death-rate from fevers was 31·93 per 1,000. From bowel-complaints the rate was 4·10 and from injuries 0·25 per 1,000. From other causes the rate was 1·77.

The next highest death-rate from all causes (35·86 per 1,000 against 32·42 in 1884), which is nearly the same as that of Nadiád Táluka (35·59 against 28·12 in 1884) occurred in Mátar Táluka, in which 13 deaths, or 0·17 per 1,000, were ascribed to cholera. There were only 2 deaths from small-pox, whilst the death-rate (32·23) from fevers was the highest in the rural circles. The death-rate from bowel complaints was 2·84 and from injuries 0·34 per 1,000. From other causes the rate (0·25) was the lowest in the Collectorate.

In Nadiád Táluka 116 deaths, or 0·87, were attributed to cholera. Small-pox caused 65 deaths; the death-rate (0·49) was the highest in the rural circles. From fevers the death-rate was 27·54 and from bowel-complaints 4·16 per 1,000.

The lowest death-rate from all causes (31·65 per 1,000 against 24·55 in 1884), which is nearly the same as that of Thásra Táluka (31·86 against 27·53 in 1884), took place in Kapadvanj Táluka. No death was reported from cholera; and only 1 from small-pox. The death-rate from fevers was 26·58 per 1,000 and from bowel-complaints 3·08. From injuries and other causes the rates were respectively 0·38 and 1·59 per 1,000.

In Thásra Táluka cholera caused 40 deaths, or 0·47 per 1,000. No death from small-pox was recorded in it; whilst the death-rate from fevers was 27·47. The death-rate from bowel-complaints was 2·11 per 1,000. From injuries and other causes the rates were respectively 0·40 and 1·41.

Amongst the urban circles the death-rate from all causes (49·21 per 1,000 against 30·70 in 1884) in the town of Nadiád was the highest in the Collectorate, in which 17 deaths, or 0·60 per 1,000, were ascribed to cholera. Small-pox caused no death, whilst the death-rate from fevers (42·25 per 1,000) was the highest in the Collectorate. The death-rate from bowel-complaints was 2·72 per 1,000. From injuries and other causes the rates were respectively 0·46 and 3·18.

The lowest death-rate from all causes (22·98 per 1,000 against 22·49 in 1884) in the Collectorate was reported in the town of Borsad, in which 9 deaths, or 0·74 per 1,000, were recorded from cholera. Small-pox caused 8 deaths: the death-rate (0·65) from this cause was the highest in the Collectorate. The death-rates from fevers (20·77) and from bowel-complaints (0·08) were the lowest in the Collectorate. From injuries the rate (0·74) was the highest in the Collectorate. There were no deaths recorded from other causes.

The registration of vital statistics in the town of Borsad appears to be much neglected, and the rates as regards the births and deaths cannot be accepted as correct. The registration of births in the remaining towns is also not properly attended to. In the tálukás the registration of births is very fairly carried out.

The registration of deaths throughout the Collectorate, except the town of Borsad, appears to have been fairly carried out.

Panch Maháls.

41. The Collectorate of Panch Maháls is divided into 5 rural and 2 town circles. It contains 675 towns and villages, and covers an area of 1,613 square miles. The population is 255,479, and the average density amounts to 158·38 persons. The registration of births amongst the rural circles is fairly carried out in the tálukás of Godhra, Dohad and Jhálod; but in the remaining 2 tálukas, Kálol and Hálol, the registration of births appears to have been not properly attended to, as the recorded birth-rate amongst them is below the standard (40 per 1000). Amongst the town circles the registration of births is very much neglected. The recorded birth-rate in the town of Dohad and Godhra is far below the standard. The recorded birth-rate in 1885 amongst the rural circles is in excess of that for 1884 in each táluka except Kálol, in which the birth-rate was 33·97 against 34·92 per 1,000 in 1884. Amongst the town circles the recorded birth-rate (28·08) in the town of Dohad is in excess of that (22·27) for 1884; but at Godhra a birth-rate 17·39 per 1,000 was recorded against 18·06 in 1884. Amongst the rural circles the recorded birth-rate in each táluka is higher than the death-rate. In Dohad Táluka the birth-rate (45·87 per 1,000) is nearly three times more than its death-rate (16·16). In Godhra and Jhálod Tálukas the birth-rates (41·94 and 43·02) are more than double the death-rates (19·91 and 20·55 respectively). Amongst the urban circles the recorded birth-rate (17·39) in the town of Godhra is nearly the same as its death-rate (17·46); but at Dohad the birth-rate (28·08) was below its death-

rate (31·70). These facts prove that the registration of vital statistics in these towns is deplorably defective, and such returns are simply worthless.

The total number of deaths from all causes in 1885 amounted to 5,477, the death-rate being 21·44 per 1,000 against 19·50 in 1884 and a decennial mean of 22·91.

The maximum monthly mortality (547) took place in October and the minimum (372) in July.

Cholera commenced in April, attained its maximum intensity in May, and disappeared in October after causing 114 deaths, or 0·45 per 1,000, against 275 or 1·08 in 1884 and a decennial mean of 595 or 2·41. Cholera made its appearance in this Collectorate in the tálukás of Godhra, Kálol and Hálol, and the town of Godhra. In the remaining tálukas, Dohad and Jhálod, and the town of Dohad no deaths were reported from this disease. The highest death-rate (1·62 per 1,000) in the Collectorate, and which is nearly the same as that in the town of Godhra (1·05 per 1,000), took place in Hálol Táluka. The next highest death-rate (0·85) occurred in Kálol Táluka. In Godhra Táluka the death-rate (0·14) was the lowest in the Collectorate. Small-pox prevailed from March to June to a slight extent, and caused only 15 deaths, against 74 in 1884 and a decennial mean of 44. The death-rate being 0·06 per 1,000 against 0·29 in 1884 and a decennial mean of 0·18. The number of deaths from fevers was 4,938 against 4,314 in 1884 and a decennial mean of 4,272. The death-rate (19·50 per 1,000) was above the mean of the previous 10 years (17·32) and higher than the rate in 1884 (16·88).

The following statement shows the number of births and deaths by causes and their ratios per 1,000 of population in each táluka and town in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka and town with that for 1884 and the zilla rate with that of 1884 and the mean of the previous 10 years:—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of Towns and Villages.	Births.			Deaths.																Ratio of Deaths from all Causes per 1,000 of Population in 1884.
									Cholera.		Small-pox.		Fever.		Bowel-complaints.		Injuries.		Other Causes.		All Causes.		
						Number for 1885.	Ratio per 1,000 of Population.	Ratio per 1,000 of Population in 1884.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	
Panch Mahals.	Godhra Rural Circle	64,976	597·83	108·69	232	2,725	41·94	36·35	9	0·14	1	0·01	1,199	18·45	40	0·61	31	0·48	14	0·22	1,294	19·91	18·08
	Dohad "	47,219	599·83	147·12	120	2,166	45·87	40·05	..	..	..	..	721	15·27	15	0·32	9	0·19	18	0·38	763	16·16	15·48
	Jhálod "	41,026			93	1,745	43·02	31·07	..	..	6	0·15	806	19·65	3	0·07	21	0·51	7	0·17	843	20·55	14·60
	Kálol "	43,269	416·	184·39	66	1,470	34·97	34·92	37	0·85	..	..	1,007	23·27	37	0·85	22	0·51	16	0·37	1,119	25·86	23·1
	Hálol "	33,253			156	1,291	38·82	33·80	54	1·62	1	0·03	748	22·49	9	0·27	17	0·51	3	0·09	832	25·02	22·67
	Godhra Town Circle	13,342	0·17	78,482·35	1	232	17·39	18·06	14	1·05	..	..	149	11·17	33	2·47	10	0·75	27	2·02	233	17·46	19·41
	Dohad "	12,394	0·17	72,905·88	1	348	28·08	22·27	..	..	7	0·56	353	28·48	7	0·56	5	0·40	21	1·69	393	31·70	19·9
	1885	255,479	1,613·	158·38	675	9,997	39·13	..	114	0·45	15	0·06	4,983	19·50	144	0·56	115	0·45	106	0·41	5,477	21·44	..
	1884				..	8,926	34·94	..	275	1·08	74	·29	4,314	16·83	115	·45	105	·42	97	·38	4,983	19·50	..
	Mean for 10 years, 1875—1884				..	6,036	24·47	..	595	2·41	44	·18	4,272	17·32	305	1·24	113	·46	322	1·30	5,651	22·91	..

N. B.—The area in square miles of Dohad and Jhálod tálukás is shown together, as well as that of Kálol and Hálol tálukás in the Census Report.

Amongst the rural circles the highest death-rate from all causes (25·86 per 1,000 against 28·17 in 1884), which is nearly the same as that of Hálol Táluka (25·02 against 22·61 in 1884), took place in Kálol Táluka, in which 37 deaths, or 0·85 per 1,000, were ascribed to cholera. Small-pox caused no death, whilst the death-rate from fevers (23·27) was the highest in the rural circles. The death-rate from bowel-complaints (0·85) was also the highest in the rural circles. From injuries the rate was 0·51 and from other causes 0·37 per 1,000.

In Hálol Táluka cholera caused 54 deaths, the death-rate (1·62 per 1,000) was the highest in the Collectorate. There was only 1 death from small-pox, whilst the death-rate from fevers (22·49) was the next highest in the rural circles. The death-rates from bowel-complaints (0·27) and from other causes (0·09) were the lowest in the Collectorate.

The lowest death-rate from all causes (16·16 per 1,000 against 15·48 in 1884), which is also the lowest in the Collectorate, occurred in Dohad Táluka, in which no deaths from cholera and small-pox were recorded. The death-rate from fevers (15·27) was the lowest in the rural circles. From bowel-complaints the death-rate was 0·32. The death-rate from injuries (0·19) was the lowest in the Collectorate. From other causes the death-rate (0·38) was the highest in the rural circles.

Amongst the urban circles the death-rate from all causes (31·70 per 1,000 against 19·93 in 1884) in the town of Dohad was the highest in the Collectorate. There were no deaths from cholera. Small-pox caused 7 deaths; the death-rate (0·56 per 1,000) was the highest in the Collectorate. The death-rate from fevers (28·48 per 1,000) was also the highest in the Collectorate. From bowel-complaints and injuries the rates were respectively 0·56 and 0·40 per 1,000, and from other causes 1·69.

In the town of Godhra 14 deaths were ascribed to cholera; the death-rate (1·05 per 1,000) was the next highest in the Collectorate. Small-pox caused no death, whilst the death-rate (11·17 per 1,000) from fevers was the lowest in the Collectorate. The death-rate (2·47 per 1,000) from bowel-complaints was the highest in the Collectorate. From injuries and other causes the rates (0·75 and 2·02 per 1,000) were the highest in the Collectorate.

The registration of births in the towns of Godhra and Dohad and that of deaths in the former are much neglected.

The registration of births in Godhra, Dohad and Jhálod tálukás appears to have been very well performed, as it is in each taluka above the standard; but the registration of deaths throughout the Collectorate is inaccurate, and a great deal more attention is required before it can be considered even approximately correct.

Ahmedabad.

42. The Collectorate of Ahmedabad is divided into 7 rural, 4 town and 1 cantonment circles. It contains 862 towns and villages, and covers an area of 3,821 square miles. The population is 856,324, and the average density per square mile amounts to 224·10 persons. Amongst the rural registration circles the recorded birth-rate in 1885 is in excess of that for 1884 in each táluka, except Daskroi, in which the recorded birth-rate (33·60 per 1,000) is nearly the same as that for 1884 (33·04); the registration of births is fairly carried out only in the tálukás of Gogha, Dhandhuka and Viramgám. In other tálukás the recorded birth-rate is below the standard (40 per 1,000). In Sánand Táluka the registration of births appears to have been again very much neglected during 1885: the recorded birth-rate in it was 29·21 per 1,000 against 22·76 in 1884. There appears to have been a great improvement in the registration of births in Gogha and Viramgám tálukás in this year over that for the previous year. The recorded birth-rate in the former was 52·85 per 1,000 against 37·39 in 1884, and in the latter 42·07 against 28·12. Amongst the urban circles the registration of births was very much neglected during the year in each town, except in the town of Gogha, the recorded birth-rate in which was 40·92 against 36·39 per 1,000 in 1884. In other towns the recorded birth-rate in each is below the standard. In the cantonment of Ahmedabad the recorded birth-rate was only 17·53 per 1,000. The recorded birth-rate in each táluka, except Sánand, is higher than the death-rate. The most notable instance of birth-rate higher than the death-rate is the táluka of Gogha, in which it (52·85 per 1,000) is more than double the recorded death-rate (23·67). In the tálukás of Dhanduka and Viramgám the recorded birth-rate is considerably higher than the death-rate. In the former it was 44·24 per 1,000 and the death-rate 27·36, and in the latter these rates were respectively 42·07 and 30·11 per 1,000. Amongst the urban circles the recorded birth-rates in the town of Gogha (40·92 per 1,000) and in Dholka (37·09) are higher than the recorded death-rates (26·05 and 24·49 respectively); but in the towns of Ahmedabad and Viramgám the

birth-rates were considerably below the death-rates. In the former the birth-rate was 39·46, the death-rate being 53·93 and in the latter 39·23 and 53·19 respectively. In the Cantonment of Ahmedabad the birth-rate (17·53 per 1,000) is much below the recorded death-rate (26·80).

The total number of deaths from all causes in 1885 was 28,698 against 25,352 in 1884 and a decennial mean of 24,273. The death-rate per 1,000 of population being 33·51 against 29·60 in 1884 and a decennial mean of 28·89.

The maximum monthly mortality (2,703) took place in October, and the minimum (1,950) in July.

Cholera commenced in April, disappeared in May, but re-appeared in June, attained its maximum intensity in August, and disappeared in December. The number of deaths attributed to it was 176 against 116 in 1884 and a decennial mean of 836, the death-rate being 0·20 per 1,000 of population against 0·14 in 1884 and a decennial mean of 0·99. Cholera made its appearance in this Collectorate in a mild type in three tálukás, *viz.*, Daskroi, Parántíj and Dholka, 2 towns, Ahmedabad and Dholka, and the cantonment of Ahmedabad. In the other tálukás and towns no deaths were reported from this cause. The highest death-rate from cholera (2·31 per 1,000) in the Collectorate took place in the town of Dholka. The next highest (0·61) was recorded in Parántíj Táluka. The death-rate in the remaining affected tálukás, town and cantonment was below 0·60 per 1,000. Small-pox prevailed to a very slight extent in January, April, May and June, and caused only 17 deaths, or 0·02 per 1,000, against 260 or 0·30 in 1884, and a decennial mean of 206 or 0·25. The total deaths from fevers amounted to 22,727 against 19,681 in 1884 and a decennial mean of 18,233. The death-rate (26·54 per 1,000) from fevers was much higher than the death-rate (22·98) in 1884 and a decennial mean of 21·70.

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each táluka, town and cantonment in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka, town and cantonment with that for 1884 and the zilla rate with that of 1884, and the mean of the previous 10 years:—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of Towns and Villages.	Births. Number for 1885.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1884.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes Per 1,000 of Population in 1884.
Ahmedabad.	Daskroi Rural Circle ..	143,942	345·80	416·26	137	4,837	33·60	33·04	13	0·09	..	..	4,247	29·50	336	2·33	41	0·28	41	0·28	4,678	32·49	24·71
	Gogha „ ..	22,307	223·25	99·92	62	1,179	52·85	37·39	..	..	..	..	359	16·00	66	2·95	7	0·31	76	3·41	528	23·67	27·07
	Dhaudhuka „ ..	123,107	1·098	112·12	141	5,446	44·24	38·22	..	..	5	0·04	1,970	16·02	886	7·20	36	0·29	472	3·83	3,369	27·36	27·33
	Sánand „ ..	76,964	·360	213·79	85	2,248	29·21	22·76	..	..	4	0·05	2,134	27·73	132	1·72	24	0·31	58	0·75	2,352	30·56	23·42
	Viramgám „ ..	117,584	676·39	173·84	155	4,947	42·07	28·12	..	..	1	0·01	3,283	27·92	153	1·30	26	0·22	78	0·66	3,541	30·11	22·42
	Parántíj „ ..	107,554	·449	239·54	161	3,615	33·61	31·25	66	0·61	..	..	2,295	21·27	102	0·95	27	0·25	73	0·68	2,663	24·76	24·55
	Dholka „ ..	93,476	664·25	140·72	117	3,558	38·01	32·24	6	0·06	7	0·07	2,696	28·86	229	2·45	48	0·51	170	1·82	3,158	33·78	31·38
	Ahmedabad Town Circle .	124,767	2·20	56,712·27	1	4,924	39·46	42·03	49	0·39	..	..	4,566	36·60	103	0·82	16	0·13	1,995	15·99	6,729	53·93	49·07
	Gogha „ ..	7,063	0·75	9,417·33	1	289	40·92	36·39	..	..	..	..	101	14·30	75	10·62	6	0·85	2	0·28	184	26·05	29·74
	Viramgám „ ..	18,900	0·61	31,131·15	1	745	39·23	45·92	..	..	..	..	738	38·87	230	12·11	3	0·16	39	2·05	1,010	53·19	61·23
	Dholka „ ..	17,715	0·75	23,621·33	1	657	37·09	40·54	41	2·31	..	..	185	10·44	72	4·06	4	0·23	132	7·45	434	24·49	16·43
	Ahmedabad Cantonment.	1,940	..	..	..	34	17·53	11·34	1	0·51	..	..	51	26·29	..	..	..	..	..	..	52	26·80	15·45
	Europeans and Eurasians and fighting men in the Cantonment ..	914																					
	1885 ..	8,56,324	3·821	224·10	862	32,474	37·92	..	176	0·20	17	0·02	22,727	26·54	2,404	2·81	238	0·28	3,136	3·66	28,698	33·51	..
	1884 ..					28,844	33·68	..	116	·14	260	·30	19,681	22·98	1,926	2·25	190	·22	3,179	3·71	25,352	29·60	..
	Mean for 10 years, 1875—1884 ..					20,440	24·32	..	836	·99	206	·25	18,233	21·70	1,879	1·64	237	·28	3,382	4·02	24,273	28·89	..

N.B.—The area of the Cantonment of Ahmedabad is included in the town of Ahmedabad, as it is not separately shown in the Census Report.

Amongst the rural circles the highest death-rate from all causes (33·78 per 1,000 against 31·38 in 1884) took place in Dholka Táluka, in which 6 deaths were ascribed to cholera; the death-rate (0·06) was the lowest in the Collectorate. Small-pox caused 7 deaths, or 0·07, whilst the death-rate from fevers was 28·86 per 1,000. From bowel-complaints the death-rate was 2·45 and from injuries 0·51. The rate from other causes was 1·82 per 1,000.

The next highest death-rate from all causes (32·49 per 1,000 against 24·71 in 1884) occurred in Daskroi Táluka, in which 13 deaths, or 0·09, were recorded from cholera. Small-pox caused no death, whilst the death-rate (29·50 per 1,000) from fevers was the highest in the rural circles. From bowel-complaints the rate was 2·33 and from injuries 0·28 per 1,000. From other causes the death-rate was 0·28.

The lowest death-rate from all causes (23·67 per 1,000 against 27·07 in 1884) occurred in Gogha Táluka, in which no deaths from cholera or small-pox were recorded. The death-rate from fevers was 16·09 and from bowel-complaints 3·86 per 1,000. From injuries and other causes the rates were respectively 0·31 and 3·41.

The next lowest death-rate from all causes (24·76 per 1,000 against 24·55 in 1884) took place in Parántíj Táluka, in which 66 deaths were attributed to cholera. The death-rate (0·61 per 1,000) from this cause was the highest in the rural circles. There were no deaths from small-pox, whilst the death-rate from fevers was 22·27 per 1,000. From bowel-complaints the death-rate (0·95) was the lowest in the rural circles. The death-rate from injuries was 0·25 and from other causes 0·68.

Amongst the urban circles the exceedingly high death-rate from all causes (53·93 per 1,000 of population against 49·07), which is nearly the same as that in the town of Viramgám (53·19 against 61·24 per 1,000 in 1884), took place in the town of Ahmedabad, in which 49 deaths, or 0·39, were attributed to cholera. Small-pox caused no death, whilst the death-rate from fevers was 36·60 per 1,000. The death-rate (0·82 per 1,000) from bowel-complaints was the lowest in the Collectorate. From injuries the death-rate (0·13) was also the lowest in the Collectorate, but from other causes (15·99) was the highest in the Collectorate. The exceedingly high death-rate from other causes in this town is a proof that the deaths were not recorded under their proper heads.

In the town of Viramgám there were no deaths from cholera and small-pox. The death-rates (38·87 per 1,000) from fevers and (12·11) from bowel-complaints in this town were the highest in the Collectorate. From injuries the death-rate (0·16 per 1,000) was the lowest in the Collectorate. The death-rate from other causes was 2·05.

The lowest recorded death-rate from all causes (24·49 per 1,000 against 16·43 in 1884) took place in the town of Dholka, in which 41 deaths were ascribed to cholera. The death-rate (2·31 per 1,000) from this cause was the highest in the Collectorate. Small-pox caused no death, whilst the death-rate (10·44 per 1,000) from fevers was the lowest in the Collectorate. From bowel-complaints and injuries the rates were respectively 4·06 and 0·23 per 1,000. The death-rate from other causes (7·45) was the next highest in the Collectorate.

In the town of Gogha the death-rate from all causes was 26·05 per 1,000 against 28·74 in 1884. There were no deaths from cholera and small-pox, whilst the death-rate (14·30 per 1,000) from fevers was the next lowest in the Collectorate. The death-rate (10·62) from bowel-complaints was the next highest in the Collectorate. From injuries the rate (0·85 per 1,000) was the highest in the Collectorate, and from other causes 0·28, which is the same as that in Daskroi Táluka (0·28), was the lowest in the Collectorate.

In the Cantonment of Ahmedabad the death-rate from all causes was 26·80 per 1,000 against 15·46 in 1884. Only 1 death, or 0·51 per 1,000, was attributed to cholera. Small-pox caused no death, whilst the death-rate from fevers was 26·29 per 1,000. There were no deaths recorded from bowel-complaints, injuries and other causes. This shows how extremely inaccurate the registration of vital statistics in this Cantonment is.

In the tálukás of Daskroi, Sánand, Parántíj and Dholka the registration of births is not as carefully performed as it should be, and the registration of deaths in almost all the tálukás is much neglected.

Amongst the town circles greater attention should be paid to the registration of births in each town. The registration of deaths in the towns of Gogha and Dholka is very much neglected, and the death-rates in them cannot be accepted as correct.

The registration of vital statistics in the Cantonment of Ahmedabad is much neglected.

SIND REGISTRATION DISTRICT.

COLLECTORATES.

1. Karáchi.	4. Shikárpur.
2. Hyderabad.	5. Upper Sind Frontier.
3. Thar and Párkar.	

Karáchi.

43. The Collectorate of Karáchi is divided into 14 rural and 1 town circles. It contains 3,754 towns and villages, and covers an area of 14,115 square miles. The population is 478,688, and the average density per square mile amounts to 33·91 persons. Although the recorded birth-rate during 1885 is higher than in 1884 in Karáchi, Dádú, Johi, Sehwan, Mirpur Batoro, and Sujáwal tálukás, yet the registration of births in each táluka of this Collectorate is very much neglected, as the recorded birth-rate is far below the standard (40 per 1,000). In the town of Karáchi the recorded birth-rate (44·72 per 1,000 against 46·64 in 1884) shows that with an effective system of registration, the birth-rate in Sind as in other parts of the Presidency equals at least 40 per 1,000 of population. The recorded birth-rate amongst the rural circles is lower than the death-rate in each táluka, except Kohistan, in which it (22·00 per 1,000) is higher than the recorded death-rate (7·69). In the tálukás of Karáchi, Sákro, Ghorábári and Jati the recorded death-rate is more than double the recorded birth-rate, and in Sháhbandar it (37·32 per 1,000) is even more than three times the recorded birth-rate (12·80). In the town of Karáchi the recorded birth-rate (44·72) is much higher than the recorded death-rate (24·94).

The total number of recorded deaths from all causes in 1885 amounted to 12,712, the death-rate being 26·55 per 1,000 of population against 17·59 in 1884 and a decennial mean of 16·24.

The maximum monthly mortality (2,513) took place in June, and the minimum (472) in August.

Cholera was present at the close of 1884, and in 1885 became epidemic, and attained its maximum intensity in June, but disappeared in October. The total number of deaths attributed to this cause was 4,549, or 9·50 per 1,000 against 517 or 1·08 in 1884 and a decennial mean of 174 or 0·39. Cholera made its appearance in each táluka and town in this Collectorate, except Kohistan Táluka, in which no death was reported from this disease. The highest death-rate (27·31 per 1,000) from this cause in the Collectorate was in Sákro Táluka. The next highest (24·99) occurred in Sháhbandar; after these follow Tatta and Sujáwul tálukás, in which the rates were respectively 15·65 and 13·06 per 1,000 In the remaining tálukás the death-rate was between 7 and 12 per 1,000, except the táluka of Kotri, in which the death-rate was only 0·76 per 1,000. In the town of Karáchi the death-rate was 2·75 per 1,000. Small-pox prevailed to a great extent throughout the year, except August, September, November and December, and caused 272 deaths against 196 in 1884 and a decennial mean of 96; the death-rate was 0·57 per 1,000 against 0·41 in 1884 and a decennial mean of 0·21. The number of deaths from fevers was 6,176 against 5,931 in 1884 and a decennial mean of 5,437; the death-rate (12·90 per 1,000) being nearly the same as that for 1884 (12·39) and the mean of the previous 10 years (12·20.)

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka and town with that for 1884 and the zilla rate with that of 1884 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of Towns and Villages.	Births.			Deaths.																Ratio of Deaths from all Causes per 1,000 of Population in 1884.
									Cholera.		Small-pox.		Fevers.		Bowel-complaints.		Injuries.		Other Causes.		All Causes.				
						Number for 1885.	Ratio per 1,000 of Population.	Ratio per 1,000 of Population in 1884.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.			
Karáchi.	Karáchi Rural Circle	20,256	1,284·34	15·77	193	190	9·38	4·94	177	8·73	..	..	152	7·50	..	..	3	0·15	37	1·83	369	18·21			5·9.7
	Kohistan „ ..	11,957	2,652	4·51	85	263	22·00	22·16	..	..	..	..	66	5·52	..	..	4	0·33	22	1·84	92	7·69			14·71
	Dádu.. „ ..																								
	Johi „ ..	121,188	1,686	71·85	780	2,878	23·72	21·35	799	6·60	18	0·15	1,957	16·15	99	0·82	59	0·49	249	2·05	3,181	26·26			17·22
	Sehwan . „ ..																								
	Mánjhand „ ..	18,952	581	32·62	91	450	23·74	30·81	175	9·23	..	..	366	19·31	12	0·63	10	0·53	23	1·21	586	30·92			27·64
	Kotri „ ..	24,870	839	29·64	211	300	12·06	13·47	19	0·76	..	..	376	15·12	10	0·40	6	0·24	35	1·41	446	17·93			20·70
	Tatta „ ..	39,750	1,322	30·05	262	736	18·52	18·56	622	15·65	41	1·03	583	14·79	9	0·22	22	0·55	63	1·58	1,345	33·84			16·50
	Sákro „ ..	21,711	1,108	19·59	336	402	18·52	18·56	593	27·31	33	1·52	363	16·72	5	0·23	21	0·97	4	0·18	1,019	46·93			14·28
	Ghorábári „ ..	34,360	566	60·70	366	539	15·69	18·28	397	11·55	113	3·29	490	14·26	4	0·12	20	0·58	71	2·07	1,095	31·87			16·27
	Mirpur Batoro,. ..	32,179	268	120·07	368	609	19·92	11·22	263	18·17	20	0·62	362	11·25	12	0·37	22	0·68	23	0·71	702	21·81			16·38
	Sujáwal „ ..	30,314	267	113·53	305	373	12·30	11·45	396	3·06	5	0·16	238	7·85	5	0·16	16	0·53	11	0·36	671	22·12			12·07
	Jati „ ..	27,055	2,145	12·61	323	221	8·17	8·57	225	28·32	1	0·04	223	8·24	1	0·04	13	0·48	1	0·04	464	17·15			15·75
	Shahbandar „ ..	27,814	1,338	20·04	433	356	12·80	24·56	605	4·99	38	1·36	270	9·71	3	0·11	22	0·79	10	0·36	1,038	37·32			17·08
	Karáchi Town Circle	68,332	7·66	8,920·63	91	3,056	4·72	46·64	188	2·75	3	0·04	725	10·61	123	1·87	31	0·45	629	9·21	1,704	24·94			24·54
	1885	472,688	14,115	33·91	3,754	10,368	21·66	..	4,549	9·50	272	0·57	6,176	12·90	288	0·60	249	0·52	1,178	2·46	12,712	26·55			..
	1884 ..					10,637	22·22	..	517	1·08	196	0·41	5,931	12·39	183	0·38	194	0·41	1,398	2·92	8,419	17·59			..
	Mean for 10 years, 1875—1884 ..					6,455	14·49	..	179	0·39	96	0·21	5,437	12·20	135	0·30	283	0·64	1,113	2·50	7,238	16·24			..

N. B.—The new táluka "Johi" is composed of some of the villages from Dádu and Sewhan tálukás (*vide* page 1107 of the *Bombay Government Gazette* dated 27th November 1884). As the population and area, according to Census of 1881, are not obtainable for each of these tálukás, the births and deaths in Dádu, Johi and Sehwan Tálukas are shown together.

Amongst the rural circles and in the Collectorate the highest death-rate from all causes (46·93 per 1,000 against 14·28 in 1884) took place in Sákro Táluka in which 593 deaths were attributed to cholera; the death-rate (27·31 per 1,000) was the highest in the Collectorate. Small-pox caused 33 deaths, or 1·52 per 1,000, whilst the death-rate from fevers was 16·72. From bowel-complaints the rate was 0·23, and from injuries 0·97 per 1,000. The rate from other causes was 0·18.

The next highest death-rate from all causes (37·32 per 1,000 against 17·08 in 1884) occurred in Sháhbandar Táluka, in which 695 deaths were ascribed to cholera. The death-rate (24·99 per 1,000) from this cause was the next highest in the Collectorate. Small-pox caused 38 deaths, or 1·36, whilst the death-rate from fevers was 9·71 per 1,000. From bowel-complaints and injuries the rates were respectively 0·11 and 0·79, and from other causes 0·36 per 1,000.

The lowest recorded, but of course entirely untrustworthy, death-rate from all causes (7·69 per 1,000 against 14·71 in 1884), which is also the lowest in the Collectorate, took place in Kohistan Táluka, in which no deaths from cholera or small-pox were reported.

The next lowest death-rate from all causes (17·15 per 1,000 against 15·78 in 1884), which is nearly the same as that of Kotri Táluka (17·93 per 1,000 against 20·70 in 1884), was recorded in Jati Táluka, in which cholera caused 225 deaths or 8·32 per 1,000. There was only 1 death from small-pox, whilst the death-rate from fevers was 8·24 per 1,000. From bowel-complaints and other causes only 1 death was recorded for each, or 0·04 per 1,000.

The death-rate (0·76 per 1,000) from cholera in Kotri Táluka was the lowest in the Collectorate. No death from small-pox was recorded in it, whilst the death-rate from fevers was 15·12 per 1,000.

In the town of Karáchi the recorded death-rate from all causes was 24·94 per 1,000 against 24·54 in 1884. There were 188 deaths, or 2·75 per 1,000, from cholera, and 3 or 0·04 from small-pox. From fevers the death-rate was 10·61 per 1,000. The death-rate (1·87 per 1,000) from bowel-complaints was the highest in the Collectorate. From injuries the rate was 0·45 per 1,000. The death-rate (9·21 per 1,000) from other causes was the highest in the Collectorate, and is a proof that the deaths were not properly recorded under their causes.

In the town of Karáchi the registration of births appears to have been carefully carried out, but that of deaths is not as well attended to.

The registration of vital statistics in each táluka of the Collectorate is very much neglected, and the birth and death-rates as reported are manifestly incorrect.

Hyderabad.

44. The Collectorate of Hyderabad is divided into 13 rural and 1 town circles. It contains 7,805 towns and villages, and covers an area of 9,030 square miles. The population is 754,624, and the average density per square mile amounts to 83·57 persons. Although the recorded birth-rate in some of the tálukás and in the town of Hyderabad during 1885 is in excess of that for 1884, yet the registration of births is extremely defective in this Collectorate, as it is far below the standard (40 per 1,000). It is deplorably bad in the tálukás of Badin and Tando Bágo, the recorded birth-rate for the former being 7·56 per 1,000 against 7·35 in 1884 and for the latter 6·99 against 5·75. The recorded birth-rates amongst the rural circles are higher than the recorded death-rates in the tálukas of Badin, Hála, Kandiáro, and Naushahro. In Moro Táluka the recorded birth-rate (25·49 per 1,000) is nearly the same as the death-rate (25·11). In the remaining 8 tálukás the birth-rates are lower than the death-rates. In Hyderabad the recorded birth-rate (15·53 per 1,000) is much lower than the death-rate (26·77). The town of Hyderabad returns a birth-rate of 28·23 and a death-rate of 27·48.

The total number of deaths from all causes in 1885 amounted to 14,975, the death-rate being 19·85 per 1,000 of population against 15·77 in 1884 and a decennial mean of 12·67.

The maximum monthly mortality (2,502) took place in July and the minimum (636) in September.

Cholera commenced in March, attained its maximum intensity in July, and disappeared in September: 3,020 deaths were ascribed to it, against 192 in 1884 and a decennial mean of 162. The death-rate from this cause being 4·00 per 1,000 against 0·25 in 1884 and a decennial mean of 0·22. Cholera appeared in every táluka of the Collectorate. The highest death-rate (10·91 per 1,000) took place in Hyderabad Táluka. The next highest death-rates (7·76 and 7·49 per 1,000) were in Dero Mohbat and Mirpur Khás tálukás. Then come the tálukás of Tando Alahyar, in which the rate was 5·96, Moro (5·56) and Sákrand (5·36 per 1,000). In the tálukás of Guni and Naushahro the death-rates were respectively 4·81 and 3·43 per 1,000. In the remaining 5 tálukás the death-rate above 1 but below 2 per 1,000 was in three tálukas, *viz.*, Kandiáro (1·63), Shahdádpur (1·51) and Tando Bágo (1·21), and in two, Hála and Badin, the rates were 0·55 and 0·18 per 1,000 respectively. In the town of Hyderabad the death-rate was 3·78 per 1,000 of population. Small-pox prevailed to a slight extent from January to August and November, and caused 125 deaths, or 0·17 per 1,000, against 750 or 0·99 in 1884 and a decennial mean of 211 or 0·29. The total deaths from fevers were 10,583, against 9,899 in 1884 and a decennial mean of 7,777. The death-rate (14·03 per 1,000) was above the decennial mean (10·58) and for 1884 (13·13).

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka and town with that for 1884 and the zilla rate with that of 1884 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of Towns and Villages.	Births. Number for 1885.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1884.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fever. Number.	Fever. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1884.
Hyderabad.	Hyderabad Rural Circle	57,830	404	143·14	700	898	15·53	20·18	631	10·91	7	0·12	853	14·75	13	0·22	1	0·22	31	0·54	1,448	26·77	17·66
	Guni ,, ..	71,162	989	71·95	894	1,130	15·88	6·84	342	4·81	35	0·49	1,041	14·63	11	0·15	45	0·63	54	0·75	1,528	21·47	10·75
	Badin ,, ..	65,108	795	82·65	763	497	7·56	7·36	12	0·18	13	0·20	391	5·95	1	0·01	32	0·49	9	0·14	458	6·97	8·89
	Tando Bágo ,, ..	55,473	709	78·24	749	388	6·99	5·75	67	1·21	11	0·20	308	5·55	1	0·02	16	0·29	2	0·03	405	7·30	7·07
	Dero Mohbat ,, ..	37,260	670	55·61	424	836	22·44	16·88	289	7·76	9	0·24	528	14·17	15	0·40	20	0·54	35	2·28	946	25·39	19·57
	Hála ,, ..	78,149	531	147·17	598	1,650	21·11	11·71	43	0·55	..	..	853	10·91	3	0·04	38	0·49	39	0·41	969	12·40	9·89
	Tando Alahyar ,, ..	66,126	697	94·87	485	872	13·19	14·94	394	5·96	..	..	967	14·62	10	0·15	53	0·80	49	0·74	1,473	22·27	16·03
	Shahdádpur ,, ..	55,593	733	75·84	601	977	17·57	17·34	84	1·51	6	0·11	1,067	19·55	21	0·38	17	0·31	12	0·21	1,227	22·07	19·40
	Mirpur Khás ,, ..	24,979	561	44·53	240	338	15·53	12·97	187	7·49	..	..	371	14·85	1	0·04	12	0·48	16	0·64	587	23·50	11·77
	Kandiáro ,, ..	39,336	315	124·87	580	1,160	29·49	33·84	64	1·63	1	0·03	653	16·60	9	0·23	26	0·66	10	0·25	763	19·40	19·76
	Naushahro ,, ..	61,295	532	115·22	726	1,560	25·45	25·00	210	3·43	11	0·18	1,036	16·90	3	0·05	45	0·73	46	0·65	1,345	21·94	20·12
	Moro ,, ..	44,443	704	63·13	492	1,138	25·49	30·42	247	5·56	18	0·40	798	17·96	3	0·07	22	0·49	28	0·63	1,116	25·11	20·96
	Sákrand ,, ..	52,075	1,390	37·46	612	1,088	20·89	22·54	279	5·36	5	0·10	1,025	19·68	3	0·06	32	0·61	24	0·46	1,368	26·27	21·93
	Hyderabad Town Circle	45,195	..	..	1	1,276	28·23	24·56	171	3·78	9	0·20	672	14·87	3	0·07	29	0·64	358	7·92	1,242	27·48	23·90
	1885 ..	754,624	9,030	83·57	7,805	13,853	18·36	..	3,020	4·00	125	0·17	10,683	14·03	97	0·13	400	0·53	750	0·99	14,975	19·85	..
	1884 ..					12,757	16·91	..	192	0·25	750	0·99	9,899	13·13	70	0·09	359	0·48	627	0·83	11,897	15·77	..
	Mean for 10 years, 1875—1884 ..					7,391	10·06	..	162	0·22	211	0·29	7,777	10·58	83	0·11	469	0·64	609	0·83	9,311	12·67	..

N. B.—The area of the town of Hyderabad is included in Hyderabad Táluka, as it is not separately shown in the Census Report.

Amongst the rural circles and in the Collectorate the highest death-rate from all causes (26·77 per 1,000 against 17·66 in 1884), which is nearly the same as that of Sakrand Táluka (26·27 per 1,000 against 21·93 in 1884), was reported in Hyderabad Táluka, in which 631 deaths were attributed to cholera; the death-rate (10·91 per 1,000) was the highest in the Collectorate. Small-pox caused only 7 deaths, or 0·12 per 1000, whilst the death-rate from fevers was 14·75. From bowel-complaints the death-rate was 0·22 per 1,000, and from injuries (0·22) was the lowest in the Collectorate. The rate from other causes was 0·54.

In Sákrand Táluka, 279 persons, or 5·36 per 1,000, died of cholera. Small-pox caused only 5 deaths, or 0·10 per 1,000, whilst the death-rate (19·68 per 1,000) from fevers was the highest in the Collectorate. The death-rate from bowel-complaints was 0·06 and from injuries 0·61 per 1,000. From other causes the rate was 0·46.

The lowest death-rate from all causes (6·97 per 1,000 against 8·89 in 1884), which is also the lowest in the Collectorate, took place in Badin Táluka, in which cholera carried off 12 persons; the death-rate (0·18) was the lowest in the Collectorate. Small-pox caused 13 deaths, or 0·20 per 1,000, whilst the death-rate from fevers was 5·95. From bowel-complaints the rate (0·01) was the lowest in the Collectorate, and from injuries it was 0·49 per 1,000. The death-rate from other causes was 0·14 per 1,000.

The next lowest death-rate from all causes (7·30 per 1,000 against 7·07 in 1884) occurred in Tando Bágo Táluka, in which 67 deaths, or 1·21 per 1,000, were ascribed to cholera. Small-pox caused 11 deaths, or 0·20 per 1,000, whilst the death-rate (5·55 per 1,000) from fevers was the lowest in the Collectorate. From bowel-complaints and injuries the rates were respectively 0·02 and 0·29. The death-rate from other causes (0·03 per 1,000) was the lowest in the Collectorate.

In the town of Hyderabad the death-rate from all causes was 27·48 per 1,000 against 23·90 in 1884. There were 171 deaths, or 3·78 per 1,000, from cholera and 9 or 0·20 from small-pox. The death-rate from fevers was 14·87 per 1,000 and from bowel-complaints 0·07. From injuries the death-rate was 0·64 and from other causes 7·92 per 1,000, which was the highest in the Collectorate.

The registration of vital statistics, as noticed last year, is much neglected throughout the Collectorate. There are, I know, great difficulties in the way of securing a proper registration of vital statistics in Sind, but perhaps something can be done to improve it.

Thar and Párkar.

45. The Collectorate of Thar and Párkar is divided into 7 rural and 1 town circles. It contains 1,691 towns and villages, and covers an area of 12,729 square miles. The population is 203,344, and the average density per square mile amounts

to 15·98 persons. The recorded birth-rate during the year 1885 is in excess of that for 1884 in each táluka and town in this Collectorate, except Nagar Táluka, in which the recorded birth-rate (33·94 per 1,000) is slightly lower than of 1884 (34·63). The registration of births is extremely well carried out in the talukás of Cháchra and Dipla, the recorded birth-rate being 51·99 per 1,000 against 30·45 in 1884 in the former and 47·74 against 43·24 in 1884 in the latter. In other tálukas and in the town of Umarkot the recorded birth-rate is far below the standard (40 per 1,000). In Khipra and Sánghar tálukás the above good results have not been attained, as the recorded birth-rates are 16·87 and 18·60 per 1,000 respectively against 11·54 and 11·38 in 1884. In Umarkot Táluka the recorded birth-rate is 22·93 per 1,000 against 15·95 in 1884, and in the town of Umarkot the birth-rate is 22·63 per 1,000 against 21·22 in 1884. The recorded birth-rate amongst the rural registration circles is higher than the death-rate in each táluka, except Khipra, in which the recorded birth-rate (16·87 per 1,000) is slightly below the death-rate (17·33). In Cháchra Táluka the birth-rate (51·99 per 1,000) is more than four times the recorded death-rate (12·23). In Nagar and Miti tálukás the birth-rate (33·94 and 38·21 per 1,000) are more than three times the recorded death-rates (10·45 and 12·34 respectively). In Dipla Táluka the birth-rate (47·74 per 1,000) is more than double its death-rate (17·88). In the town of Umarkot the recorded birth-rate (22·63 per 1,000) is below than the death-rate (24·05).

The total number of deaths from all causes in 1885 was 2,951, the death-rate being 14·51 per 1,000 against 15·55 in 1884 and a decennial mean of 14·52.

The maximum monthly mortality (383) took place in January and the minimum (160) in August.

Cholera commenced in June, attained its maximum intensity in July, and disappeared in September after causing 128 deaths. No deaths from this disease were recorded in 1884, but a decennial mean of 20, Amongst the rural circles cholera appeared in Umarkot and Khipra tálukás, the reported death-rate in each being nearly the same (1·93 and 1·96 per 1,000 respectively). No death was reported in the remaining tálukás. There were 2 deaths, or 0·71 per 1,000, from cholera in the town of Umarkot. Small-pox caused only 8 deaths, or 0·04 per 1,000, against 0·26 in 1884 and a decennial mean of 0·08. The deaths from fevers were 2,508 against 2,844 in 1884 and a decennial mean of 2,469, the death-rate (12·33 per 1,000) was below the decennial mean (13·01) and the rate (13·99) in 1884.

The following statement shows the number of births and deaths by causes and the ratios per 1,000 in each táluka and town in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka and town with that for 1884 and the zilla rate with that of 1884 and the mean of the previous 10 years:—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of Towns and Villages.	Births. Number for 1885.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1884.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1884.
Thar and Párkar.	Umarkot Rural Circle	38,807	1,107	62·52	316	890	22·93	15·95	75	1·93	1	0·03	598	15·40	5	0·13	15	0·39	41	1·06	735	18·94	14·87
	Cháchra " ..	37,046			248	1,926	51·99	30·45	..	..	..	..	401	10·82	5	0·13	19	0·51	28	0·76	453	12·23	14·60
	Nagar " ..	37,512	8,508	9·08	240	1,273	33·94	34·63	..	..	..	..	380	10·13	..	..	7	0·19	5	0·13	392	10·45	16·29
	Mitti " ..	22,611			230	864	38·21	27·64	..	..	..	..	236	10·44	1	0·04	24	1·06	18	0·80	279	12·34	16·80
	Dipla " ..	17,114			299	817	47·74	43·24	..	..	1	0·06	252	14·72	6	0·35	21	1·23	26	1·52	306	17·88	22·15
	Khipra " ..	26,079	3,114	15·23	262	440	16·87	11·54	51	1·96	3	0·12	358	13·73	6	0·23	5	0·19	29	1·11	452	17·33	12·54
	Sánghar " ..	21,347			96	397	18·60	11·38	..	..	3	0·14	230	10·77	1	0·05	11	0·52	21	0·98	266	12·46	12·18
	Umarkot Town Circle	2,828	..	..	1	64	22·63	21·22	2	·71	..	..	53	18·74	..	..	2	0·71	11	3·89	68	24·05	29·70
	1885 ..	203,344	12,729	15·98	1,691	6,671	32·81	..	128	·63	8	0·04	2,508	12·33	24	0·12	104	0·51	179	0·88	2,951	14·51	..
					1884 ..	5,014	24·66	..	..	..	53	0·26	2,844	13·99	30	0·15	92	0·45	144	0·71	3,163	15·55	..
	Mean for 10 years, 1875—1884 ..					3,640	19·18	..	20	·11	15	·08	2,469	13·01	30	·16	86	0·45	135	0·71	2,755	14·52	..

N. B.—The area of the town of Umarkot is included in Umarkot Táluka, as it is not separately shown in the Census Report.

Amongst the rural circles the highest death-rate from all causes (18·94 per 1,000 against 14·87 in 1884) took place in Umarkot Táluka, in which cholera caused 75 deaths, or 1·93 per 1,000. There was only 1 death from small-pox; the death-rate (0·03) was the lowest in the Collectorate. The death-rate (15·40 per 1,000) from fevers was the highest amongst the rural circles. From bowel-complaints the rate was 0·13 and from injuries 0·39 per 1,000. The death-rate from other causes was 1·06.

The lowest death-rate from all causes (10·45 per 1,000 against 16·39 in 1884) occurred in Nagar Táluka. There were no deaths from cholera and small-pox, whilst the death-rate (10·13 per 1,000) from fevers was the lowest in the Collectorate. From bowel-complaints there were no deaths. The death-rate from injuries was 0·19. From other causes the death-rate (0·13) was the lowest in the Collectorate.

The highest death-rate (1·96 per 1,000) from cholera in the Collectorate was in Khipra Táluka.

The death-rate from all causes (24·05 per 1,000 against 29·70 in 1884) in the town of Umarkot was the highest in the Collectorate. There were only 2 deaths, or 0·71 per 1,000, from cholera and no deaths from small-pox. The death-rate (18·74 per 1,000) from fevers was the highest in the Collectorate. From bowel-complaints there were no deaths recorded, whilst the rate from injuries was 0·71 per 1,000. The death-rate (3·89 per 1,000) from other causes was the highest in the Collectorate.

The registration of births is neglected in the tálukás of Umarkot, Khipra and Sánghar. In Nagar and Mitti it is fairly carried out.

The registration of deaths is much neglected throughout the Collectorate.

The vital statistics in the town of Umarkot are also much neglected.

Shikárpur.

46. The Collectorate of Shikárpur is divided into 15 rural and 3 town circles. It contains 5,670 towns and villages, and covers an area of 10,001 square miles. The population is 852,986, and the average density per square mile amounts to 85·29 per 1,000. The Collectorate of Shikárpur has undergone certain territorial redistribution of tálukás during the year (*vide* page 36 of the *Bombay Government Gazette*, dated 17th January 1884). A new táluka has been formed by adding some of the villages of Kambar Táluka to Sujával, the new táluka being called Shahdádpur, which has been transferred to the Upper Sind Frontier Collectorate. I tried to obtain information as to sex and caste according to the census of 1881 and the area of the new táluka, in order to show its statistics separately; but the Deputy Sanitary Commissioner, Sind Registration District, states that this information is not obtainable. It has been, therefore, found to be impossible to make any alteration in the annual statements, and they must continue to be shown in the Shikárpur Collectorate until the next census. The area hitherto known as Tigar Táluka has been divided between Nasirábad, Labdárya and Mehar, and a part of Rato-dero has been included in Kambar; but as the population of each táluka is not obtainable, the birth and deaths are grouped together for these tálukás. During the year 1885 the registration of births was extremely defective throughout the Collectorate. The recorded birth-rate in each táluka and town is far below the standard (40 per 1,000). And amongst the rural circles it is lower than 1884 in each táluka, except Lárkhána, Kambar, Rato-dero and Shahdádpur. Amongst the town circles the recorded birth-rate (18·35 per 1,000) is in excess of that for 1884 (16·94) in the town of Shikárpur only; but in the towns of Sukkur and Lárkhána the recorded birth-rates (15·33 and 29·04 per 1,000 respectively) are lower than 1884 (19·82 and 36·24). The recorded birth-rate amongst the rural circles is lower than the death-rate in the tálukás of Sukkur, Naushahro, Ubauro and Kakar. In the remaining tálukás the recorded birth-rate is higher than the death-rate, except the táluka of Rohri, in which the recorded birth-rate (16·14 per 1,000) is nearly the same as the death-rate (16·64). The extremely low birth-rate (5·01 per 1,000) than the death-rate (13·68) was in Ubauro Táluka. Amongst the town circles the recorded birth-rate (29·04 per 1,000) is higher than the death-rate (20·85) in the town of Lárkhána. In the towns of Shikárpur and Sukkur the recorded birth-rates (18·35 and 15·33 per 1,000 respectively) are lower than the death-rates (19·79 and 25·70)

The total number of recorded deaths from all causes in 1885 amounted to 15,053, the death-rate being 17·64 per 1,000 of population against 19·01 in 1884 and a decennial mean of 12·49.

The maximum monthly mortality (2,980) took place in July and the minimum (701) in September.

Cholera commenced in May, attained its maximum intensity in July, and disappeared in December; 3,410 deaths were ascribed to it against 659 in 1884 and a decennial mean of 202. The death-rate from this cause was 4·00 per 1,000 against 0·77 in 1884 and a decennial mean of 0·25. Cholera appeared in each táluka and town in the Collectorate. An extremely high death-rate (23·69 per 1,000) took place in Sukkur Táluka. The next highest (8·10 per 1,000) was in the town of Sukkur. Then follow the tálukás of Ubauro and Kakar, in which the rate was 4·99 and 4·79 per 1,000 respectively. In the tálukás of Shikárpur, Naushahro, Kambar, Rato-dero and Shahdádpur the rate was above 3 per 1,000. In the remaining tálukás and towns the death-rate was below 3 per 1,000. Small-pox prevailed throughout the year, and caused 98 deaths, or 0·11 per 1,000, against 28 or 0·03 in 1884 and a decennial mean of 131 or 0·16. The deaths from fevers were 10,745 against 14,500 in 1884 and a decennial mean of 8,895, the death-rate being 12·60 per 1,000 against 17·00 in 1884 and a decennial mean of 11·02.

The following statement shows the number of births and deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka and town with that for 1884 and the zilla rate with that of 1884 and the mean of the previous 10 years:—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Number of Towns and Villages.	Births.			Deaths.																		Ratio of Deaths from all Causes per 1,000 of Population in 1884.
									Cholera.		Small-pox.		Fevers.		Bowel-complaints.		Injuries.		Other Causes.		All Causes.						
						Number for 1885.	Ratio per 1,000 of Population.	Ratio per 1,000 of Population in 1884.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.					
Shikárpur	Shikárpur Rural Circle	32,616	477·50	68·30	257	525	16·10	18·24	99	3·04	4	0·12	360	11·04	2	0·06	18	0·55	..	..	483	14·81					17·57
	Sukkur .. „	51,238	284	180·41	203	1,239	24·18	34·21	1,214	23·69	9	0·18	717	13·99	1	0·02	17	0·33	6	0·12	1,964	38·33					28·22
	Naushahro .. „	58,728	402	138·62	305	735	13·19	17·75	193	3·46	3	0·05	587	10·53	13	0·23	11	0·20	13	0·23	820	14·71					17·41
	Kohri .. „	68,582	1,550	44·25	488	1,107	16·14	27·67	159	2·32	1	0·01	993	14·02	37	0·54	33	0·48	18	0·26	1,141	16·64					22·70
	Ghotki .. „	61,502	554	111·01	657	1,271	20·66	31·23	106	1·71	3	0·05	733	11·94	2	0·03	19	0·31	3	0·05	865	14·08					18·00
	Mirpur .. „	39,112	1,721	22·73	532	543	13·88	15·14	6	0·15	..	..	417	10·66	...	..	13	0·33	4	0·10	440	11·25					14·42
	Ubauro .. „	39,918	450	88·71	262	200	5·01	10·40	199	4·99	..	..	327	8·19	1	0·03	17	0·43	2	0·05	546	13·68					10·65
	Lárkhána .. „	83,952	291	288·49	692	1,707	20·33	12·76	79	0·94	6	0·07	909	11·90	3	0·04	31	0·37	1	0·01	1,119	13·33					18·05
	Kambar .. „ } Rato-dero .. „ } Shahdádpur „ }	151,489	1,396	208·79	845	3,137	21·04	15·12	568	3·75	22	0·14	1,893	12·50	6	0·04	42	0·28	31	0·20	2,562	16·91					15·12
	Kakar .. „ } Labdárya .. „ } Mehar .. „ } Nasírábad .. „ }	135,908	1,183	488·10	1,064	3,328	24·49	26·57	282	2·07	6	0·04	1,851	13·62	85	0·63	53	0·39	50	0·37	2,327	17·12					20·29
	Shikárpur Town Circle	42,496	950	4473·26	1	780	18·35	16·94	45	1·06	22	0·52	737	17·34	1	0·02	9	0·21	27	0·64	841	19·79					20·26
	Sukkur .. „	27,339	..	..	1	420	15·33	19·82	222	8·10	6	0·22	319	11·65	43	1·57	21	0·77	93	3·39	704	25·79					26·25
	Lárkhána .. „	13,188	..	..	1	383	29·04	36·24	2	0·15	..	..	248	18·80	3	0·23	3	0·23	19	1·44	275	20·85					38·75
	Travelling Population	368																									
	1885 ..	852,986	10,001	85·29	5,670	16,232	19·03	..	3,410	4·00	98	0·11	10,745	12·60	207	0·24	315	0·36	278	0·33	15,053	17·64					..
	1884 ..					17,905	20·99	..	659	0·77	28	0·03	14,500	17·00	297	0·35	387	0·45	346	0·41	16,217	19·01					..
	Mean for 10 years, 1875—1884 ..					9,587	11·83	..	202	0·25	131	0·16	8,895	11·02	203	0·26	318	0·39	331	0·41	10,085	12·49					..

N.B.—The total area of the Collectorate includes the area of the Kohistan hills, which is 1,135 square miles.
The births and deaths in Kambár, Rato-dero and Shahdádpur tálukás have been taken together, as the population according to Census of 1881 is not obtainable for each separately. So for the tálukás of Labdárya, Mehar and Nasírábad the births and deaths have been added together.
The areas in square miles of the towns of Sukkur and Lárkhána are included in their respective tálukás, as they are not separately shown in the Census Report.

Amongst the rural circles and in the Collectorate the highest death-rate from all causes (38·33 per 1,000 against 28·22 in 1884) took place in Sukkur Táluka, in which 1,214 deaths were attributed to cholera. The death-rate (23·69 per 1,000) from this cause was the highest in the Collectorate. Small-pox caused 9 deaths, or 0·18

per 1000, whilst the death-rate from fevers (13·99) was the highest in the rural circles. The death-rate from bowel-complaints was 0·02 and from injuries 0·33 per 1,000. From other causes the rate was 0·12.

The next highest death-rate from all causes (19·51 per 1,000 against 18·59 in 1884) occurred in Kakar Táluka, in which cholera carried off 237 persons, or 4·79 per 1,000. Small-pox caused 16 deaths; the death-rate (0·32 per 1,000) was the highest in the rural circles. The death-rate from fevers was 13·41 per 1,000 and from bowel-complaints 0·20. From injuries and other causes the rates were respectively 0·57 and 0·22.

The lowest recorded death-rate from all causes (11·25 per 1,000 against 14·42 in 1884), which is also the lowest in the Collectorate, took place in Mirpur Táluka, in which only 6 deaths were ascribed to cholera. The death-rate (0·15 per 1,000) from this cause was the lowest in the Collectorate. Small-pox caused no deaths, whilst the death-rate from fevers was 10·66 per 1,000. There were no deaths from bowel-complaints. From injuries and other causes the rates were respectively 0·33 and 0·10 per 1,000.

Amongst the town circles the highest death-rate from all causes (25·70 per 1,000 against 26·25 in 1884) in the town of Sukkur was the next highest in the Collectorate. There were 222 deaths from cholera; the death-rate (8·10 per 1,000) was the next highest in the Collectorate. Small-pox caused 6 deaths, or 0·22 per 1,000, whilst the death-rate from fevers was 11·65. The death-rate from bowel-complaints (1·57 per 1,000) was the highest in the Collectorate. The rates (0·77 and 3·39 per 1,000) from injuries and other causes respectively were also the highest in the Collectorate.

The lowest death-rate from all causes (19·79 per 1,000 against 20·26 in 1884) occurred in the town of Shikárpur, in which 45 deaths, or 1·06 per 1,000, were attributed to cholera. Small-pox caused 22 deaths, or 0·52 per 1,000, whilst the death-rate from fevers was 17·34 per 1,000. From bowel-complaints the rate was 0·02 and from injuries 0·21. The rate from other causes was 0·64 per 1,000.

In the town of Lárkhána the death-rate from all causes was 20·85 per 1,000 against 38·75 in 1884. Only 2 deaths were ascribed to cholera, and no deaths from small-pox were reported, whilst the death-rate (18·80) from fevers was the highest in the Collectorate. The death-rate from bowel-complaints and injuries was the same, 0·23 per 1,000, for each. From other causes the death-rate (1·44 per 1,000) was the next highest in the Collectorate.

The registration of vital statistics is extremely defective throughout the Collectorate.

Upper Sind Frontier.

47. The Collectorate of Upper Sind Frontier is divided into 3 rural and 1 town circles. It contains 855 towns and villages, and covers an area of 2,139 square miles. The population is 124,181, and the average density per square mile amounts to 58·05 persons. The registration of births in each táluka and town is very backward, as the recorded birth-rate in each of the registration circles is far below the standard (40 per 1,000). Amongst the rural circles the recorded birth-rate in each táluka in 1885 is lower than 1884. In the town of Jacobabad the recorded birth-rate was also lower (12·33 per 1,000 against 18·50) than 1884. The recorded birth-rate in this Collectorate is only higher than the death-rate in Jacobabad Táluka. The recorded birth-rate in it was 16·36 per 1,000, whilst the recorded death-rate being 13·75. In other tálukás and in the town of Jacobabad the birth-rate is lower than the death-rate. The recorded birth-rate (12·33 per 1,000) in the town of Jacobabad is considerably lower than the death-rate (26·87).

The total number of recorded deaths from all causes amounted to 1,899, the death-rate being 15·29 per 1,000 against 16·04 in 1884 and a decennial mean of 9·43.

The maximum monthly mortality (383) took place in July and the minimum (72) in February.

Cholera commenced in May, attained its maximum intensity in July, and disappeared in September: 612 deaths, or 4·93 per 1,000, were attributed to it, against

107 or 0·86 in 1884 and a decennial mean of 21 or 0·20. It was present in each táluka and town in the Collectorate. The highest death-rate (6·34 per 1,000), which is nearly the same as that of Thul Táluka (6·30), took place in the town of Jacobabad. The next highest death-rate (4·12) occurred in Jacobabad Táluka. In Kashmor Táluka the death-rate from cholera was 3·70 per 1,000. Small-pox caused 27 deaths, or 0·22 per 1,000, against 6 or 0·05 in 1884 and a decennial mean of 1·7 or 0·16. The number of deaths from fevers was 1,126 against 1,753 in 1884 and a decennial mean of 823. The death-rate (9·07 per 1,000) from fevers was above the decennial mean (7·94), but below the rate in 1884 (14·12).

The following table shows the number of births and deaths by causes and their ratios per 1,000 in each táluka and town in the Collectorate, and compares the birth-rate and the death-rate from all causes in each táluka and town with that for 1884 and the zilla rate with that of 1884 and the mean of the previous 10 years :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in square miles	Average Population per square mile.	Number of Towns and Villages.	Births.			Deaths.																Ratio of Deaths from all Causes per 1,000 of Population in 1884.
									Cholera.		Small-pox.		Fevers.		Bowel-complaints.		Injuries.		Other Causes.		All Causes.				
						Number for 1885.	Ratio per 1,000 of Population.	Ratio per 1,000 of Population in 1884.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.		
Upper Sind Frontier.	Jacobabad Rural Circle.	25,972	455	57·08	261	425	16·36	21·33	107	4·12	26	1·00	216	8·32	1	0·04	6	·23	1	0·04	357	13·75	11·17		
	Thul .. .. „	43,025	821	52·41	324	581	13·50	18·34	271	6·30	..	..	331	7·69	13	0·30	13	·30	6	0·14	634	14·74	12·97		
	Kashmor .. „	43,832	863	50·79	209	489	11·16	21·33	162	3·70	..	..	407	9·29	20	0·46	9	·21	5	0·11	603	13·76	20·07		
	Jacobabad Town Circle.	11,352	..	..	1	140	12·33	18·50	72	6·34	1	0·09	172	15·15	18	1·59	..	..	42	3·70	305	26·87	23·26		
	1885 ..	124,181	2,139	58·05	835	1,635	13·17	..	612	4·93	27	0·22	1,126	9·07	52	0·42	28	0·23	54	0·43	1,899	15·29	..		
	1884 ..					2,488	20·03	..	107	0·86	6	0·05	1,753	14·12	48	0·39	26	0·21	52	0·42	1,992	16·04	..		
	Mean for 10 years, 1875—1884 ..					1,116	10·77	..	21	·20	17	·16	823	7·94	30	0·29	34	·33	53	·51	978	9·43	..		

N. B.—The area of the town of Jacobabad is included in Jacobabad Táluka, as it is not separately shown in the Census Report.

Amongst the rural circles the highest death-rate from all causes (14·74 per 1,000 against 12·97 in 1884) took place in Thul Táluka, in which cholera carried off 271 persons : the death-rate (6·30) was the highest in the rural circles. Small-pox caused no death, whilst the death-rate (7·69 per 1,000) from fevers was the lowest in the Collectorate. The death-rate from bowel-complaints and injuries was the same (0·30 per 1,000). From other causes the rate was 0·14.

The lowest recorded death-rate from all causes (13·75 per 1,000 against 11·17 in 1884), which is the same as that of Kashmor Táluka (13·76 against 20·07 in 1884), occurred in Jacobabad Táluka, in which 107 deaths, or 4·12 per 1,000, were ascribed to cholera. Small-pox caused 26 deaths, or 1·00 per 1,000, whilst the death-rate from fevers was 8·32. The death-rate (0·04) from bowel-complaints was the lowest in the Collectorate. From injuries the rate was 0·23 and from other causes 0·04 per 1,000, which was the lowest in the Collectorate.

In Kashmor Táluka there were 162 deaths from cholera; the death-rate (3·70 per 1,000) was the lowest in the Collectorate. Small-pox caused no death, whilst the death-rate from fevers was 9·29 per 1,000.

The highest death-rate from all causes (26·87 per 1,000 against 23·26 in 1884) in the Collectorate is found in the town of Jacobabad, in which 72 deaths were attributed to cholera; the death-rate (6·34 per 1,000) was the highest in the Collectorate. Small-pox caused only 1 death or 0·09 per 1000, whilst the death-

rate (1·515) from fevers was the highest in the Collectorate. The rates (1·59) from bowel-complaints and (3·70) from other causes were also the highest in the Collectorate. There were no deaths from injuries.

The registration of vital statistics, as noticed last year, is much neglected throughout the Collectorate, and such statistics are of no value.

I would earnestly hope that Government may be pleased to order some measures to be taken to improve the registration throughout the Province.

Birth and death-rates compared by Collectorates.

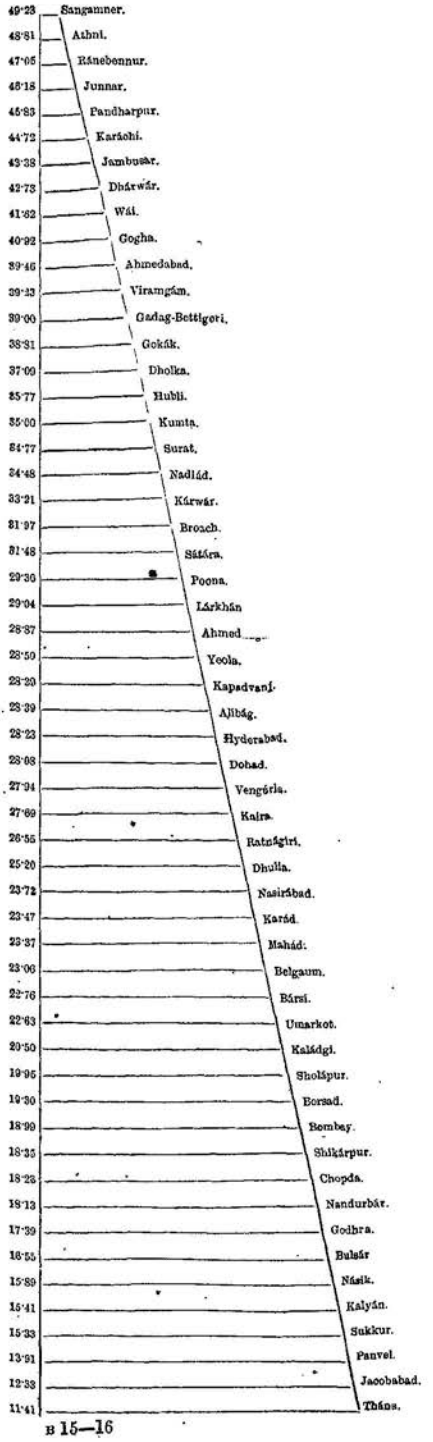
48. In the city of Bombay the birth-rate was much below the death-rate 18·99 and 27·89 per 1,000 respectively. This is clearly due, as already noticed, to defective registration. In the Collectorates of Kánara and Hyderabad the recorded birth-rates in 1885 were slightly below the recorded death-rates. In the former the recorded birth-rate was 29·86 and the death-rate 30·85 per 1,000, and in the latter they were respectively 18·36 and 19·85. In the Collectorates of Karáchi and Upper Sind Frontier the recorded birth-rates (21·66 and 13·17 respectively) were considerably below the recorded death-rates (26·55 and 15·29). In all other Collectorates the recorded birth-rates are higher than the recorded death-rates. This is especially noticed in the following Collectorates:—

Collectorates.	Birth-rate, 1885.	Death-rate, 1885.
Khándesh	39·28	29·37
Sátára	45·62	34·80
Belgaum	43·92	32·00
Dhárwár	47·80	32·65
Bijápur	44·75	25·24
Panch Maháls	39·13	21·44
Thar and Párkar	32·81	14·51

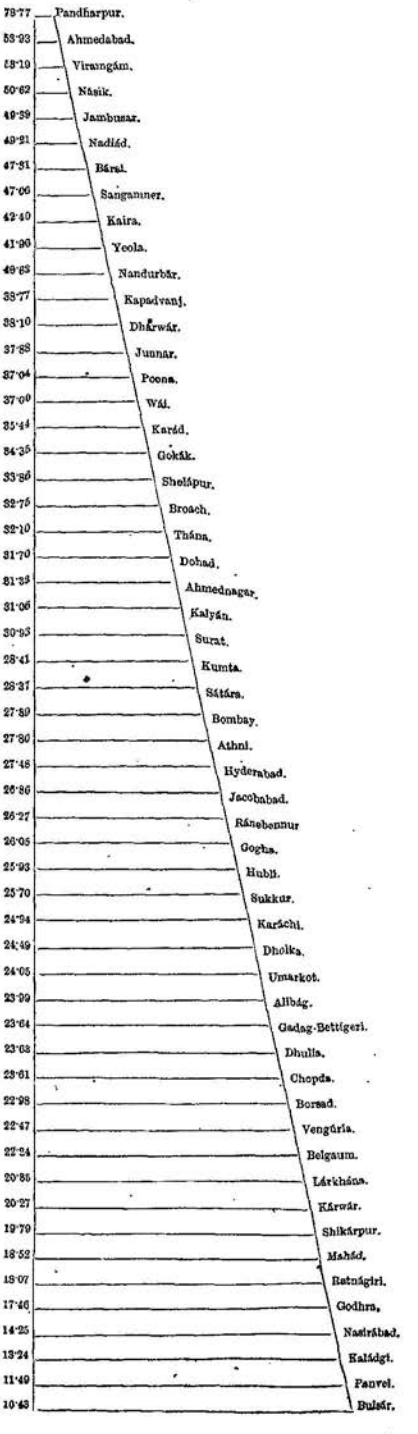
Birth and death-rates in sequence in towns.

49. It may be useful to show side by side the birth and death-rates in sequence in the town circles of this Presidency, in order to invite the special attention of Government to the high death-rate that has taken place in some of them, and the miserably low birth-rate which has been recorded in others:—

Birth-rate per 1,000.



Death-rate per 1,000.



As regards births, it will be seen that a high birth-rate is not confined to any particular part of the Presidency as noticed last year, as we find a birth-rate of 49·23 per 1,000 of population registered in Sangamner, a town in the central part of the Presidency in the Ahmednagar Collectorate; whilst at Athni, a town in the Southern Registration District in the Belgaum Collectorate, there was a birth-rate of 48·81 and at Karáchi in Sind a birth-rate of 44·72, whilst at Jambusar in Gujarát a birth-rate of 43·38 per 1,000 of population was registered. The above results, observed in widely separated parts of the Presidency, go far to prove that the normal birth-rate of the civil population is not under 45 per 1,000. If this be so, it is evident that the registration of births in the greater part of the Presidency is very inadequately performed.

As regards deaths at Pandharpur there was during 1885 the extremely high death-rate of 78·77 per 1,000. Cholera caused 480 deaths, principally among pilgrims, but none occurred from small-pox during the year: so that the epidemic of cholera only partly accounts for the high death-rate in this town. It is clear that endemic causes of mortality prevail in this undrained town, for the fever death-rate was 28·74 per 1,000, whilst that from bowel-complaints was no less than 13·90 per 1,000.

Statistics for Cantonment Bázárs in *quasi*-foreign territory.

50. The following table shows the births and deaths and their respective ratios per 1,000 of population among the civil population in those cantonments which are situated in *quasi*-foreign territory. From this it will be seen that in 1885 the total number of births registered in these cantonments during the year was 2,607 against 2,696 in 1884, the birth-rate being 28·91 per 1,000 of population against 29·64 in 1884. The birth-rate in 1885 in Aden (municipal limits), Deesa and Neemuch is higher than it was in 1884. At Bhúj it was the same as in 1884, and in the remaining cantonments it was lower than in 1884:—

	Birth-rate per 1,000 of Population.	
	1885.	1884.
Aden (municipal limits)	11·08	7·96
Baroda	16·58	19·90
Bhuj	30·73	30·73
Deesa	39·16	21·25
Mehidpur	8·85	17·70
Mhow	27·30	39·55
Neemuch	39·48	37·82
Nasirábad	48·27	53·03
Rájkot	10·88	14·30

At Mehidpur only 1 birth was registered during the year. The population of this cantonment is 113 persons as enumerated at the census of 1881. The total number of deaths in these cantonments during 1885 was 3,551, equal to a ratio of 39·37 per 1,000, against 3,395 or 37·32 per 1,000 of population in 1884. From cholera 303 deaths were recorded during the year, against 25 in 1884 in the following stations:—

	1885.	1884.
Baroda	4	2
Deesa	.....	4
Mhow	294	7
Neemuch	3	4
Nasirábad	2	8

I am glad to see that a new source of water-supply has been sanctioned for Mhow, which I hope will prevent the recurrence of such a terrible outbreak.

From small-pox there were 8 deaths against 10 in 1884, and these were reported—4 from Aden, 1 from Mhow and 3 from Nasirábad. The deaths from fevers were 1,379 against 1,161 in 1884, and from bowel-complaints 389 against 359. Injuries caused 23 deaths against 20 in 1884, and the number from all other causes amounted to 1,449 against 1,820 in 1884:—

Cantonments.	Civil Population according to Census of 1881.	Area in square miles.	Average Population per square mile.	Births.	Ratio of Births per 1,000 of Population.	Number of Deaths.							Ratio per 1,000 of Population.						
						Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other Causes.	Total.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other Causes.	Total.
Aden (municipal limits.)	24,721	11	2,247·36	274	11·08	..	4	373	263	11	324	975	..	0·16	15·09	10·63	0·45	13·11	39·44
Baroda ..	2,412	1	2,412	40	16·58	4	..	33	3	2	24	66	1·66	..	13·68	1·24	0·83	9·95	27·36
Bhuj	358	1·04	344·23	11	30·73	..	..	8	..	..	2	10	..	..	22·35	..	..	5·59	27·93
Deesa	8,376	5	1,675·20	328	39·16	..	..	161	25	..	44	230	.	..	19·22	2·98	..	5·25	27·46
Mehidpur ..	113	2	56·50	1	8·85	..	..	2	..	..	..	2	..	..	17·61	..	..	..	17·61
Mhow	17,471	6·50	2,687·86	477	27·20	294	1	365	16	6	513	1,195	16·83	0·06	20·89	0·92	0·34	29·36	68·40
Neemuch ..	12,639	4·52	2,796·24	499	39·48	3	..	156	2	..	227	388	0·24	..	12·34	0·16	..	17·96	30·70
Nasirábad ..	19,123	8·00	2,390·37	923	48·27	2	3	276	78	4	306	669	0·10	0·16	14·43	4·08	0·21	16·00	34·98
Rájkot ..	4,965	Not given.		54	10·88	..	..	5	2	..	9	16	..	..	1·01	0·40	..	1·81	3·22
Total .	90,178	39·06	2,308·70	2,607	28·91	303	8	1,379	389	23	1,449	3,551	3·36	0·09	15·29	4·31	0·25	16·07	39·37

N. B.—The population for Aden is shown as now furnished by the Assistant Political Resident and the Cantonment Magistrate at Aden.

The registration of vital statistics in the cantonment of Nasirábad is very well carried out, and at Neemuch it is also fairly performed. The extremely high death-rate (68·40) at Mhow and a high death-rate at Aden (municipal limits) (39·44) and at Nasirábad (34·98) will, I hope, attract the attention of the military authorities. At Rájkot the registration of vital statistics, as noticed last year, is very much neglected.

SECTION VI.

HISTORY OF CHIEF DISEASES.

CHOLERA.

Total mortality from cholera.

51. During 1885 cholera caused 37,287 deaths throughout the Presidency, or 23,483 more than in the preceding year, but 667 less than in the year 1883. The epidemic, as will be seen from the subjoined table, was most severely felt in the Sind Registration District, as 11,719 persons, or 4·85 per 1,000 of population, died; whilst the minimum mortality took place in the Eastern Gujarát Registration District, in which there were 1,539 deaths or 0·54 per 1,000 registered. No Collectorate of the Presidency was exempt during the year under report:—

Districts.		Collectorates.	Population according to Census of 1881.	Mean Mortality for 10 years from 1875 to 1884.		1884.		1885.	
				Number of Deaths.	Ratio per 1,000 of mean Population.	Number of Deaths.	Ratio per 1,000 of Population.	Number of Deaths.	Ratio per 1,000 of Population.
Western Registration District.	1	Khándesh	1,237,231	2,839	2·35	8	0·01	1,900	1·54
	2	Násik	781,206	1,220	1·62	76	0·10	2,737	3·50
	3	Thána	807,357	1,397	1·80	558	0·69	2,589	3·21
	4	Bombay (City)	773,196	754	1·08	568	0·73	581	0·75
	5	Kolába	482,830	835	1·85	627	1·30	975	2·02
Central Registration District.	6	Ahmednagar	751,228	2,149	2·81	24	0·03	1,132	1·51
	7	Poona	909,621	2,011	2·21	11	0·01	2,639	2·93
	8	Sholápur	582,487	1,459	2·20	31	0·05	2,357	4·04
	9	Sátára	1,062,350	2,229	2·10	99	0·09	3,152	2·97
	10	Ratnágiri	997,090	563	0·56	144	0·14	123	0·12
Southern Registration District.	11	Belgaum	864,014	2,656	2·93	2,701	3·12	3,749	4·34
	12	Dhárwár	882,007	2,477	2·62	4,655	5·27	1,354	1·53
	13	Bijápur	638,493	1,855	2·49	1,070	1·68	405	0·63
	14	Kánara	421,840	397	0·97	108	0·26	336	0·80
Eastern Gujarát Registration District.	15	Surat	614,198	892	1·46	255	0·42	646	1·05
	16	Broach	326,932	376	1·10	607	1·86	210	0·64
	17	Kaira	804,810	687	0·60	396	0·49	393	0·49
	18	Panch Mahále	255,479	597	2·42	275	1·08	114	0·45
	19	Ahmedabad	856,324	835	0·99	116	0·14	176	0·21
Sind Registration District.	20	Karáchi	478,683	173	0·39	517	1·03	4,549	9·50
	21	Hyderabad	744,624	165	0·22	192	0·25	3,020	4·00
	22	Thar and Párkar	243,344	20	0·11	..	..	128	0·53
	23	Shikárpur	852,986	202	0·25	659	0·77	3,410	4·00
	24	Upper Sind Frontier	124,181	21	0·20	107	0·86	612	4·93

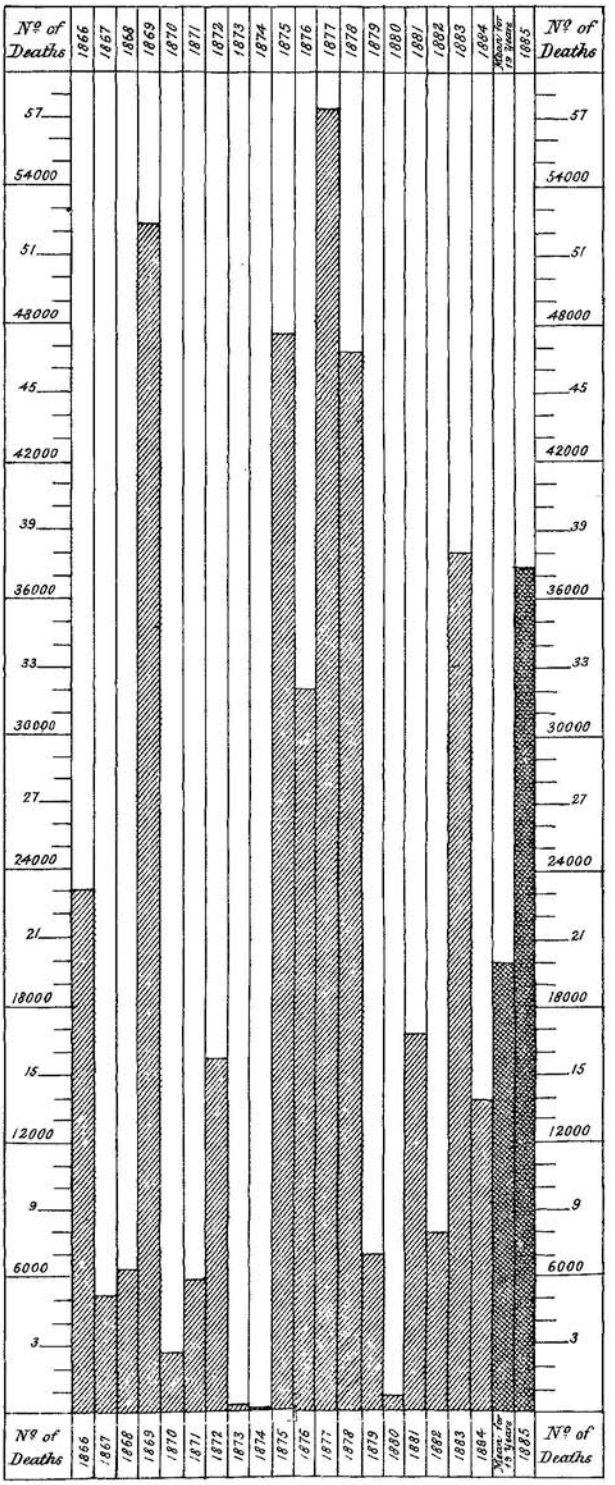
ABSTRACT.

Western Registration District	4,681,830	7,045	1·86	1,837	0·45	8,782	2·15
Central "	4,293,776	8,411	1·91	369	0·07	9,403	2·19
Southern "	2,807,254	7,395	2·45	8,534	3·04	5,844	2·08
Eastern Gujarát "	2,857,731	3,337	1·18	1,649	0·58	1,539	0·54
Sind "	2,413,823	579	0·26	1,475	0·61	11,719	4·85
Total ..	16,454,414	26,767	1·64	13,864	0·84	37,287	2·27

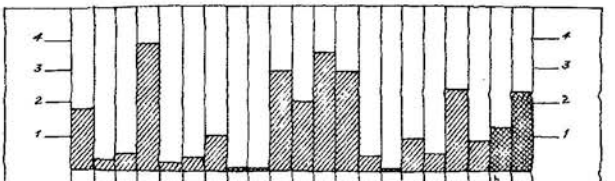
The total number of deaths from cholera in each of the 20 years ending 1885 was as follows:—

1866	23,027	1876	32,117
1867	5,143	1877	57,252
1868	6,347	1878	46,743
1869	52,230	1879	6,937
1870	2,666	1880	684
1871	5,821	1881	16,694
1872	15,642	1882	7,904
1873	283	1883	37,954
1874	37	1884	13,804
1875	47,555	1885	37,287
Total ...	158,751	Total ...	257,376

during the 20 years ending 1885.



Ratio per 1000 of Population



so that the number of cholera deaths in 1885 was exceeded in 5 of the above series of years and was 10,520 in excess of the decennial mean. The annual distribution of these deaths and their ratios are for easy reference projected in the diagram on the opposite page.

Monthly mortality.

52. The next table shows the monthly distribution of the deaths from cholera in each Collectorate as compared with 1884 and the decennial mean :—

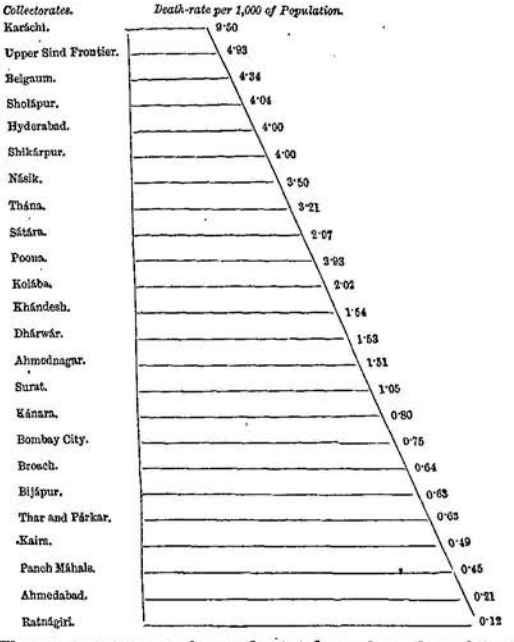
Months.	Mean for 10 years (1875—1884).		1884.		1885.		Deaths by Collectorates during 1885.								
	Number of Deaths.	Ratio per 1,000 of Population.	Number of Deaths.	Ratio per 1,000 of Population.	Number of Deaths.	Ratio per 1,000 of Population.	Khándesh.	Násik.	Thána.	Bombay City.	Kolába.	Ahmednagar.	Poona.	Sholápur.	Sátára.
January	645	0·04	207	0·01	799	0·05	..	..	411	49	92	..	17	..	..
February	714	0·04	110	0·00	743	0·05	..	218	176	30	95	..	23	..	..
March	1,285	0·08	414	0·03	1,294	0·08	..	169	173	149	147	4	218	..	1
April	2,128	0·13	387	0·02	1,144	0·07	36	81	24	109	33	49	104	..	..
May	3,847	0·24	550	0·03	3,481	0·21	116	346	208	62	108	228	87	7	..
June	5,032	0·31	1,795	0·10	9,310	0·57	317	675	505	22	391	77	272	16	72
July	5,296	0·32	2,738	0·17	11,450	0·69	813	611	374	45	96	334	455	1,003	1,000
August	4,082	0·25	2,746	0·17	4,834	0·30	298	410	417	32	8	250	641	629	933
September	1,562	0·10	1,665	0·10	1,690	0·10	211	94	241	19	..	98	174	111	455
October	1,058	0·06	1,626	0·10	1,689	0·10	67	107	36	11	..	37	496	265	507
November	581	0·04	1,100	0·07	654	0·04	39	20	24	1	..	5	42	285	144
December	507	0·03	556	0·04	199	0·01	3	6	..	2	5	..	110	41	30
Total ..	26,767	1·64	13,804	0·84	37,287	2·27	1,900	2,737	2,589	581	975	1,132	2,639	2,357	3,152

Months.	Deaths by Collectorates during 1885—*continued.*														
	Ratnágiri.	Belgaum.	Dhárwár.	Bijápur.	Kánara.	Surat.	Broach.	Kaira.	Panch Mahále.	Ahmedabad.	Karáchi.	Hyderabad.	Thar and Párkar.	Shikárpur.	Upper Sind Frontier.
January	8	156	..	2	4	..	..	..	..	..	60	..	..	..	..
February	11	32	13	..	..	3	..	1	..	..	91	..	..	..	..
March	16	5	38	..	3	63	2	..	..	..	297	9	..	..	..
April	16	50	98	..	7	177	2	11	4	8	264	71	..	..	..
May	..	1,223	335	..	176	165	5	14	33	..	283	76	..	2	7
June	6	1,542	478	36	114	181	69	92	26	1	1,837	1,096	17	1,303	165
July	34	450	218	196	31	14	54	98	31	12	1,591	1,701	89	1,910	240
August	21	217	146	63	..	15	52	116	16	50	63	67	22	168	260
September	5	60	26	11	..	7	8	47	4	33	63	..	..	13	..
October	..	13	2	61	..	10	18	13	..	36	..	...	..	10	..
November	6	1	..	35	..	11	..	1	..	36	..	..	..	4	..
December	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..
Total ..	123	3,749	1,354	405	336	646	210.	393	114	176	4,549	3,020	128	3,410	612

In January 1885 cholera prevailed in 9 Collectorates and caused 799 deaths. In February there were 743 deaths, but in March 1,294 deaths were returned from 15 Collectorates. In April there was a slight decrease, but in May the disease had spread to 19 out of the 24 Collectorates in the Presidency and caused 3,481 deaths. In June it assumed an epidemic form, as 9,310 deaths were reported from all Collectorates in the Presidency. During July the mortality rose to the very serious amount of 11,450, the maximum for the year, and the disease was present more or less in all zillas. In August and September it subsided rapidly, as there were 4,834 deaths in the former and 1,690 in the latter month. In October the mortality from the disease was almost the same as in the previous month, but in November a still further decline took place, as 654 deaths were reported from 15 Collectorates. In the last month of the year it was present in 9 Collectorates, but there were only 199 deaths, the minimum for the year, due to this cause.

Death-rates by Collectorates.

53. The following diagram exhibits the death-rate from cholera per 1,000 of population in the affected Collectorates arranged in order of the highest death-rate :—



Details of attacks and deaths and the death-rates by sexes.

54. The next statement shows the total number of registration circles and their populations arranged by Collectorates; the number of circles affected by cholera and the population living in each; the number of attacks reported from each Collectorate; the number of deaths; the death-rate arranged by sexes; the percentage of affected villages to total villages; and the percentage of deaths to attacks in each Collectorate. It also shows the percentage of the population living in the affected localities to total population and percentages of attacks and deaths to population living in the affected area :—

Districts.		Collectorates.	Total Number of Registration Circles and their collective Population.					Number of Circles affected by Cholera and the Population living in each.					Attacks.	Deaths.			Ratio of Deaths per 1,000 of Population.			Percentage of affected villages to total villages.	Percentage of Deaths to Attacks.	Percentage of the Population living in the affected localities to total of Collectorate.	Percentage of Attacks to Population living in the affected area.	Percentage of Deaths to Population living in the affected area.
			Rural Circles.	Town Circles.	Cantonment Circles.	Villages.	Total Population.	Rural Circles.	Town Circles.	Cantonment Circles.	Villages.	Population living in affected localities.		Males.	Females.	Total.	Males.	Females.	Total.					
Western Registration District.	1	Khándesh ..	22	4	..	2,679	1,237,231	21	4	..	173	305,327	4,037	1,020	886	1,906	1·61	1·45	1·54	6·40	46·54	24·68	1·34	0·6
	2	Násik	12	2	2	1,629	761,206	11	1	1	196	237,882	5,342	1,455	1,282	2,737	3·66	3·34	3·50	12·03	51·23	30·45	2·25	1·31
	3	Thána	10	2	..	1,830	807,367	10	2	..	174	183,129	3,781	1,308	1,281	2,589	3·14	3·27	3·21	9·26	68·48	22·68	2·06	1·4
	4	Bombay (City) ..	..	1	..	..	773,196	..	1	..	..	773,196	760	360	221	581	0·77	0·72	0·75	..	76·45	100·00	0·10	0·0
	5	Kolába	7	3	..	1,191	482,830	6	1	..	36	59,566	1,430	510	465	975	2·09	1·95	2·02	3·02	67·90	12·34	2·41	1·8
Central Registration District.	6	Ahmednagar ..	11	2	1	1,331	751,228	11	2	1	189	177,105	2,816	605	527	1,132	1·59	1·43	1·51	10·44	48·88	23·58	1·31	0·6
	7	Poona	8	2	2	1,181	900,621	8	1	1	236	381,683	5,404	1,368	1,271	2,639	3·01	2·85	2·93	20·07	48·83	42·38	1·42	0·4
	8	Sholápur	7	3	..	700	582,487	7	3	..	202	290,708	4,477	1,346	1,012	2,357	4·56	3·52	4·04	28·49	52·65	51·45	1·49	0·7
	9	Sátára	12	3	..	1,340	1,062,350		3	..	277	449,887	6,919	1,643	1,509	3,152	3·09	2·84	2·97	20·67	45·55	42·32	1·54	0·7
	10	Ratnágiri ..	8	2	..	1,295	997,090	5	..	..	16	35,591	211	55	68	123	0·12	0·13	0·12	1·23	58·29	3·57	0·59	0·3

Districts.		Collectorates.	Total Number of Registration Circles and their collective Population.					Number of Circles affected by Cholera and the Population living in each.					Attacks.	Deaths.			Ratio of Deaths per 1,000 of Population.			Percentage of affected villages to total villages.	Percentage of Deaths to Attacks.	Percentage of the Population living in the affected localities to total of Collectorate.	Percentage of Attacks to Population living in the affected area.	Percentage of Deaths to Population living in the affected area.
			Rural Circles.	Town Circles.	Cantonment Circles.	Villages.	Total Population.	Rural Circles.	Town Circles.	Cantonment Circles.	Villages.	Population living in affected localities.		Males.	Females.	Total.	Males.	Females.	Total.					
Southern Registration District.	11	Belgaum	7	3	1	1,073	864,014	7	2	1	228	375,717	6,885	1,979	1,770	3,749	4·55	4·12	4·34	21·25	54·45	43·49	1·83	1·06
	12	Dhárwár	14	4	..	1,281	832,007	10	2	..	125	175,209	2,282	745	609	1,354	1·68	1·38	1·53	10·60	59·33	19·34	1·30	0·77
	13	Bijápur	8	1	..	1,140	638,493	3	1	..	67	101,012	827	211	194	403	0·66	0·60	0·63	5·88	48·97	15·52	0·82	0·40
	14	Kánara	11	2	..	1,107	421,840	5	..	..	33	26,120	516	183	153	336	0·82	0·76	0·80	2·98	65·12	0·62	1·97	1·29
Eastern Gujarát Registration District.	15	Surat	8	2	..	780	614,198	7	1	..	69	199,744	1,309	318	328	646	1·04	1·06	1·05	8·84	49·35	32·52	0·62	0·32
	16	Broach	6	2	..	403	326,930	6	1	..	38	85,911	428	114	96	210	0·68	0·61	0·64	9·43	49·06	26·23	0·50	0·24
	17	Kaira	7	4	..	577	804,800	6	3	..	39	169,637	974	235	158	393	0·55	0·42	0·49	6·76	40·35	21·08	0·57	0·22
	18	Panch Mahális ..	5	2	..	678	255,479	3	1	..	20	31,225	276	65	49	114	0·49	0·39	0·45	2·97	41·30	12·23	0·85	0·36
	19	Ahmedabad ..	7	4	1	857	856,324	3	2	1	15	169,772	333	99	77	176	0·23	0·18	0·21	1·75	52·85	19·82	0·20	0·10
Sind Registration District.	20	Karáchi	13	1	..	3,733	473,688	13	1	..	760	188,982	6,994	2,666	1,883	4,549	10·02	8·85	9·50	20·25	65·00	39·48	3·70	2·41
	21	Hyderabad ..	13	1	..	7,804	754,624	13	1	..	483	176,299	4,152	1,780	1,240	3,020	4·37	3·57	4·00	6·19	72·73	23·36	2·36	1·71
	22	Thar and Párkar ..	7	1	..	1,090	293,344	2	1	..	28	6,846	183	73	55	128	0·65	0·60	0·63	1·66	69·94	3·36	2·67	1·87
	23	Shikárpur ..	16	3	..	5,667	852,986	15	3	..	312	207,608	4,520	2,028	1,382	3,410	4·40	3·52	4·00	5·51	75·35	24·31	2·18	1·64
	24	Upper Sind Frontier	3	1	..	854	124,181	3	1	..	67	23,867	862	362	250	612	5·16	4·63	4·93	7·84	70·99	19·22	3·61	2·57
		Total ..	221	55	7	40,894	16,454,414	191	38	5	3,733	4,840,783	65,275	20,527	16,760	37,287	2·42	2·16	2·27	9·13	57·12	29·42	1·35	0·77

Cholera in the Presidency generally.

55. In the Presidency, out of 37,287 deaths registered during the year, 20,527 occurred among males and 16,760 among females, so for every 100 deaths among males there were 82 deaths among females. The ratio per mille of males dying to males living was 2·42 and of females dying to females living 2·16. Last year they were 0·88 and 0·80 respectively. The deaths among females exceeded those among males in the Ratnágiri and Surat Collectorates, whilst in the remaining zillas the reverse was the case.

Mortality in Collectorates.

56. Taking the mortality by Collectorates it will be seen that the highest number of deaths, 4,549, or 9·50 per 1,000 of population, took place in the Karáchi Collectorate. Belgaum as in the preceding year comes next, where the deaths amounted to 3,749 or 4·34 per 1,000, and following it the Shikárpur Collectorate, where they were 3,374 or 3·96 per mille. In the Sátára and Hyderabad Collectorates they amounted to 3,152 and 3,020 respectively. In the Násik, Thána, Poona and Sholápur Collectorates they ranged between 2,000 and 3,000; in Khándesh, Ahmednagar and Dhárwár between 1,000 and 2,000; whilst in the remaining 12 Collectorates they were under 1,000.

Registration Circles affected by Cholera.

57. The disease during the year was considerably more diffused and fatal than during the preceding year, as out of 283 registration circles into which the Presidency is divided for registration purposes (*viz.* 221 rural, 55 town, and 7 cantonment circles), 234 (191 rural, 38 town and 5 cantonment circles) were affected with cholera against an aggregate total of 157 circles in the preceding year.

The total cholera mortality was distributed over 3,776 registration units, *viz.* 38 towns, 5 cantonments and 3,733 villages. Out of the entire population (16,454,414) of the Presidency, 4,840,783 persons, or 29·42 per cent., were living in the affected localities. Of these 37,287, or 0·77 per cent., died. Out of 40,894 inhabited villages in the Presidency, 3,733, or only 9·13 per cent., were affected with cholera.

Mortality in Rural Circles.

58. The following statement shows in order of precedence the rural circles, 9 in all, in which the deaths from cholera exceeded 10 per 1,000 of population, and that the disease principally prevailed in 5 circles of the Karáchi Collectorate, in 2 of the Dhárwár

Collectorate, and in one each of the Belgaum, Hyderabad and Shikárpur Collectorates:—

Number in sequence.	Names of Tálukás or Rural Circles.	Names of Collectorates.	Population by Census of 1881.	Deaths from Cholera.	
				Number.	Ratio per 1,000 of Population.
1	Sakro	Karáchi	21,711	593	27·31
2	Sháhbandar	Do.	27,814	695	24·99
3	Sukkur	Shikárpur	51,238	1,214	23·69
4	Tatta	Karáchi	39,750	622	15·65
5	Sampgaon	Belgaum	119,843	1,576	13·15
6	Bela or Sujawal ...	Karáchi	30,314	396	13·06
7	Ghorábári (Kotri) ...	Do.	34,360	397	11·55
8	Hyderabad	Hyderabad ...	54,872	626	11·41
9	Dhárwár ... ... / Mugdú Petha	Dhárwár	83,946	900	10·72

The aggregate population living in the above rural circles amounted to 463,848 persons, among whom 7,019 deaths, or more than one-sixth of the total cholera mortality in the Presidency, were recorded, so that one death occurred among every 66 inhabitants of these tálukás.

Urban mortality.

59. The following table shows the mortality from cholera in the 38 towns and 5 Cantonments which were affected and the death-rate in each as compared with the mean death-rate of the entire Collectorate in which it is situated:—

Collectorates.	Mean Death-rate from Cholera in 1885 of Collectorate.	Town and Cantonment Circles.	Recorded Death-rate from Cholera in 1885.
Khándesh	1·54	Dhulia Town Circle	2·71
		Nandurbar „	4·82
		Chopda „	4·74
		Nasirabad „	0·10
Násik	3·50	Násik „	16·39
		Málegaon Cantonment	5·29
Thána	3·21	Thána Town Circle	9·13
		Kalyán „	12·08
Bombay	0·75	Bombay (City) „	0·75
Kolába	2·10	Panvel „	4·35
Ahmednagar	1·51	Ahmednagar „	0·52
		Sangamner „	3·52
		Ahmednagar Cantonment ...	1·09
Poona	2·93	Poona Town Circle	1·44
		Kirkee Cantonment	0·14
Sholápur	4·04	Sholápur Town Circle	0·48
		Bársi „	2·36
		Pandharpur „	28·39
Sátára	2·97	Sátára „	0·45
		Karád „	11·78
		Wái „	7·54
Belgaum	4·34	Belgaum „	3·12
		Gokák „	13·11
		Belgaum Cantonment	1·15
Dhárwár	1·53	Dhárwár Town Circle	4·48
		Hubli „	1·47
		Kaládgi „	0·29
Bijápur	0·63	Surat „	2·86
Surat	1·05	Broach „	0·59
Broach	0·64		

Collectorates.	Mean Death-rate from Cholera in 1885 of Collectorate.	Town and Cantonment Circles.	Recorded Death-rate from Cholera in 1885.
Kaira	0·49	Kaira Town Circle	1·66
		Nadiád „	0·60
		Borsad „	0·74
Panch Mahals... ...	0·45	Godhra „	1·05
Ahmedabad	0·21	Ahmedabad „	0·39
		Dholka „	2·31
		Ahmedabad Cantonment ...	0·35
Karáchi	9·50	Karáchi Town Circle	2·75
Hyderabad	4·00	Hyderabad „	3·78
Thar and Párkar ...	0·63	Umarkot „	0·71
Shikárpur	4·00	Shikárpur „	1·06
		Sukkur „	8·10
		Lárkhána „	0·15
Upper Sind Frontier ..	4·93	Jacobabad „	6·34

High mortality in Towns.

60. In the following 8 towns, the death-rate exceeded 5 per mille of population, which is exceedingly high. Cholera prevailed also very severely at the towns of Pandharpur and Násik, but the ratios are not given here, as they would be misleading on account of the population as shown by the census being so largely augmented at the *jatras* held in each. At Pandharpur there were 443 deaths during the Ashádhi Fair in the month of July, when the pilgrim population was estimated to amount to 80,000 persons, and at Násik 395 deaths took place during the Sinhast Fair, which continued from the previous year and ended in September 1885:—

Number in sequence.	Name of Town.	Name of Collectorate.	Population of Town.	Death-rate per 1,000.
1	Gokák	Belgaum	10,307	13·11
2	Kalyán	Thána...	12,910	12·08
3	Karád	Sátára	10,778	11·78
4	Jacobabad	Upper Sind Frontier ...	11,352	6·34
5	Thána	Thána	14,456	9·13
6	Wái	Sátára	10,778	8·17
7	Sukkur	Shikárpur	27,389	8·10
8	Málegaon Cantonment ...	Násik...	3,780	5·29

Cholera in Civil Cantonments.

61. There are 7 cantonments in the Presidency from which, as regards the civil population living in each, vital statistics are received, of which 5 were affected during the year under notice, namely, Málegaon, Ahmednagar, Kirkee, Belgaum and Ahmedabad Cantonments. The details of all these are shown in the statement appended to cholera map.

Villages affected by Cholera.

62. As before noticed, during the year out of 40,894 villages in the Presidency 3,733, or 9·13 per cent., were affected by cholera. In the Sholápur Collectorate there are 709 villages, of which 202, or 28·49 per cent., were affected. In the Belgaum, Sátára, Karáchi and Poona Collectorates the percentages were 21·25, 20·67, 20·25, and 20·07 respectively; whilst in the remaining Collectorates they were below 13.

Collectorates in which cholera first appeared in *Towns* and those in which it first invaded *Villages*.

63. The following table shows the Collectorates in which cholera first appeared in *towns* and those in which it first invaded *villages*. In 3 Collectorates out of 24, cholera continued from the preceding year:—

Collectorates in which Cholera first appeared in Towns.			Collectorates in which Cholera first appeared in Villages.		
Collectorates.	Towns.	Date of first appearance.	Collectorates.	Villages.	Date of first appearance.
Bombay	Bombay City ...	2nd January 1885.	Khándesh ...	Chálisgaon ...	22nd April 1885.
Shikárpur ...	Shikárpur ...	21st May ,,	Násik	Trimbuk ...	1st February ,,
Upper Sind Frontier	Jacobabad ...	24th May ,,	Kolába	Chanje	6th January ,,
			Ahmednagar ...	Wadule B. K. ...	16th March ,,
			Poona	Shedani	5th January ,,
			Sholápur ...	Siddewádi ...	12th May ,,
			Sátára	Chindole ...	18th March ,,
			Ratnágiri ...	Málvan Peit ...	11th January ,,
			Dhárwár ...	Garag	18th February ,,
			Bijápur	Surshad... ...	29th January ,,
			Surat	Bobla	19th February ,,
			Broach	Panolee	9th March ,,
			Kaira	Saloon	20th February ,,
			Panch Mahále ...	Kanjiri	9th April ,,
			Ahmedabad ...	Ingoli	13th April ,,
			Karáchi... ...	Pobilis	2nd January ,,
			Hyderabad ...	Tando Mohobat-khan	29th March ,,
			Thar and Párkar.	Khane	13th June ,,

64. The table at pages 66-67 shows the number of attacks and deaths and the percentages of deaths to attacks in each Collectorate. The mean percentage of deaths to attacks throughout the Presidency 57·12 against 52·93 in the preceding year. Very high percentages were, as in the preceding year, noticed in the City of Bombay and in the Shikárpur and Hyderabad Collectorates, being 76·45, 75·35, and 72·73 respectively. In 8 other Collectorates, namely, Thána, Kolába, Ratnágiri, Dhárwár, Kánara, Karáchi, Thar and Párkar, and Upper Sind Frontier, the percentages were above the mean; but in the remaining Collectorates they were below.

Attacks and deaths.

65. The following table is a statement appended to the cholera map, which shows each Collectorate affected by cholera, the name and number of each circle, its population, the dates of first and last cases, the total cholera deaths, their ratios per 10,000 of population, the period of maximum intensity, the number of villages in each rural circle, and the number of those affected and not affected by the disease.

Statement appended to Cholera map.

Statement appended to Cholera Map, illustrating the Distribution, &c., of Cholera in the Bombay Presidency during the year 1885.

1	2	3	4	5	6	7	8	9		10	11	
Collectorates.	Number of Circles as shown in the Map.	Name of Circle.	Population.	Date of first Case of Cholera in the Circle during the year.	Date of last Case of Cholera in the Circle during the year.	Total Deaths from Cholera in the Circle during the year.	Ratio per 10,000.	Period of Maximum Intensity of the Disease. From	To	Number of Villages in each of the Rural Circles.	Number of those Affected by Cholera.	Not affected by Cholera.
Khándesh	1	Dhulia .. R. C.	50,638	20th May 1885.	18th August 1885.	116	19·43	July 1885.	July 1885.	152	9	143
	2	Amalner .. ,,	88,986	17th June ,,	28th September ,,	177	31·91	,, ,,	,, ,,	225	20	197
	3	Párola .. ,,		6th July ,,	26th ,, ,,	107		,, ,,	August ,,		8	
	4	Erandol .. ,,	90,872	21st June ,,	10th ,, ,,	125	13·76	,, ,,	July ,,	198	13	185
	5	Pachora .. ,,	100,051	17th May ,,	15th ,, ,,	239	23·03	,, ,,	,, ,,	187	23	164
	6	Bhadgaon .. ,,		20th June ,,	10th August ,,	42		,, ,,	,, ,,		2	
	7	Chálisgaon .. ,,	50,031	22nd April ,,	1st December ,,	422	71·40	June ,,	June ,,	132	33	99
	8	Pimpalner .. ,,	87,549	24th April ,,	28th October ,,	99	13·62	July ,,	July ,,	236	7	227
	9	Nizámpur .. ,,		14th June ,,	3rd ,, ,,	22		September ,,	September ,,		2	
	10	Nandurbár .. ,,	50,025	25th July ,,	16th ,, ,,	12	2·14	July ,,	July ,,	105	3	102
	11	Taloda .. ,,	49,788	3rd September ,,	14th September ,,	9	1·81	September ,,	September ,,	258	2	256
	12	Shaháda .. ,,	64,368	8th August ,,	20th ,, ,,	27	4·19	August ,,	August ,,	151	3	148
	13	Sindkheda .. ,,	61,461	28th June ,,	4th October ,,	84	13·68	,, ,,	September ,,	140	7	133
	14	Shirpur .. ,,	43,321	14th July ,,	7th August ,,	10	2·31	July ,,	July ,,	99	2	97
	15	Chopda .. ,,	45,903	11th ,, ,,	21st July ,,	3	0·65	,, ,,	,, ,,	91	2	89
	16	Sávda .. ,,	141,745	19th May ,,	9th September ,,	41	8·25	August ,,	September ,,	182	7	171
	17	Réver .. ,,		1st July ,,	11th ,, ,,	76		July ,,	July ,,		4	
	18	Bhusával .. ,,	90,160	23rd May ,,	11th October ,,	94	4·99	September ,,	September ,,	188	6	177
	19	Edalabad .. ,,		16th July ,,	17th August ,,	14		August ,,	August ,,		5	
	20	Jalgaon .. ,,	59,283	5th ,, ,,	5th November ,,	33	5·57	July ,,	July ,,	87	10	77
	21	Jámner .. ,,	83,535	9th June ,,	9th ,, ,,	58	6·94	September ,,	September ,,	158	5	153
	22	Dhulia .. T. C.	18,440	16th May ,,	17th August ,,	50	27·10	June ,,	June ,,	..	..	.
	23	Nandurbár .. ,,	6,841	31st July ,,	23rd October ,,	38	48·24	October ,,	October ,,	..	..	.
	24	Chopda .. ,,	13,832	5th ,, ,,	16th August ,,	66	47·37	July ,,	July ,,	..	..	.
	25	Nasirabad .. ,,	10,243	25th August ,,	26th ,, ,,	1	0·98	August ,,	August ,,	..	..	..

SKETCH MAP

TO ILLUSTRATE THE

DISTRIBUTION OF, AND COMPARATIVE MORTALITY

from

CHOLERA

in the

DIFFERENT CIRCLES OF MORTUARY REGISTRATION

OF THE PRESIDENCY OF BOMBAY

During the Year

1885

Scale 40 Miles to 1 Inch

N.B. Figures in black ink show the Number of the Registration Circle. These Numbers are given in Column 3 of the Statement relating to Map. Figures in red ink show the ratio of deaths from Cholera per 10,000 of population.

The Fractional figures indicate the date of first cases in each circle. Thus 8 means 8th July.

STATEMENT SHEWING VITAL STATISTICS &c. IN EACH COLLECTORATE DURING 1885

Divisions	Collectorates	Area in Square miles	Population	Average population per Square mile	Number of Registration Circles: Forest	Cultivated	Desert	Total	Number of Villages	Number of Deaths during the year from: Cholera	Small Pox	Fever	Bowel Complaints	Spasms	Other causes	Total	Ratio per mille of Deaths from all causes	Ratio per mille of Deaths from Cholera	Ratio of Deaths from Cholera per 10,000 of population	Ratio of Deaths from all causes per 10,000 of population	Ratio of Cholera deaths to Total deaths
1	Ahmedabad	3964	1317700	332.42	6	22	24	9671	173	1366	44	17313	2240	443	19742	30.00	30.37	12.4.42	1.0.32	30.00	4.3
2	Kaira	1749	700700	400.71	3	12	16	4473	476	2737	8	20879	4964	179	28762	41.00	41.00	4.7.32	1.0.32	41.00	2.5
3	Panch Mahals	1766	405300	230.75	1	10	12	1999	174	2386	69	16.52	877	1001	17.98	30.00	30.00	1.4.32	5.8.32	30.00	8.1
4	Surat City	10	119000	11900.00	1		1			181	40	6419	1500	362	7481	62.00	62.00	1.4.32	15.8.42	62.00	2.4
5	Surat	1901	402300	211.64	3	7	10	1196	38	371	48	7393	353	183	8348	20.75	20.75	2.4.32	9.2.32	20.75	4.5
6	Ahmednagar	6964	1167300	167.60	2	6	16	24	1324	1.35	1.18	33	19.304	2.662	1.0	23.098	19.78	23.09	34.12	19.78	58.3
7	Poona	5348	969000	181.40	2	2	8	12	1440	2.34	2.040	265	19.948	3.449	264	27.960	28.85	27.96	28.85	28.85	8.1
8	Sholapur	4617	562400	121.84			12	12	1.0	7.0	1.0	30	14.675	1.979	1.53	18.654	33.17	18.65	33.17	33.17	5.4
9	Satara	1780	1.042.550	585.98	3	12	11	1.0.0	377	4.0.3	42	13.0.7	1.0.0	1.0.4	16.0.9	43.30	36.49	12.1.32	12.9.32	36.49	2.9
10	Ratnagiri	2072	1.0.2.0.0	5.0.7.72	2	1	1.0	1.2.0	16	1.7.3	1.0.3	8.0.3	1.3.7.3	3.1.7	4.7.3	1.0.3.0	1.4.3.0	1.0.3.0	1.4.3.0	1.4.3.0	7.3
11	Belgaum	4.0.3	8.0.0.0.0	1.9.8.0.0	2	1	1.1	1.2.0	2.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
12	Dharwar	4.3.3	8.0.3.0.7	1.9.4.5.8	4	3.6	1.6	1.2.0.7	1.7.2	1.0.0.0	4.7.3	1.5.7.3	3.0.3.0	3.0.2	3.3.0.2	1.1.0.0	1.1.0.0	1.1.0.0	1.1.0.0	1.1.0.0	1.1.0.0
13	Kanara	4.0.3	1.0.4.0.0	2.5.0.0	2	1.0	1.2	1.2.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
14	Kolaba	1.0.4.3	1.0.4.0.0	2.5.0.0	2	1.0	1.2	1.2.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
15	Ratnagiri	1.0.4.3	1.0.4.0.0	2.5.0.0	2	1.0	1.2	1.2.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
16	Thana	1.0.4.3	1.0.4.0.0	2.5.0.0	2	1.0	1.2	1.2.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
17	Nasik	1.0.4.3	1.0.4.0.0	2.5.0.0	2	1.0	1.2	1.2.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
18	Khandesh	1.0.4.3	1.0.4.0.0	2.5.0.0	2	1.0	1.2	1.2.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
19	Ahmednagar	1.0.4.3	1.0.4.0.0	2.5.0.0	2	1.0	1.2	1.2.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
20	Poona	1.0.4.3	1.0.4.0.0	2.5.0.0	2	1.0	1.2	1.2.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
21	Sholapur	1.0.4.3	1.0.4.0.0	2.5.0.0	2	1.0	1.2	1.2.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
22	Satara	1.0.4.3	1.0.4.0.0	2.5.0.0	2	1.0	1.2	1.2.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
23	Sind	1.0.4.3	1.0.4.0.0	2.5.0.0	2	1.0	1.2	1.2.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
24	Kathiawar	1.0.4.3	1.0.4.0.0	2.5.0.0	2	1.0	1.2	1.2.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
25	Cutch	1.0.4.3	1.0.4.0.0	2.5.0.0	2	1.0	1.2	1.2.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0	1.0.0
	Total	1.7.0.7.0	1.4.3.4.0.0	4.2.5.0	5.1	7	1.2.0	1.9.0	4.0.0.0	1.0.3.3	1.7.3.0	1.9.6	1.4.7.0	4.3.0.0	4.0.7	1.9.7.0	2.4.0.0	1.9.7.0	2.4.0.0	2.4.0.0	1.9.7.0

Govt. Photo-zinco Office, Poona, 1886.

1	2	3	4	5	6	7	8	9		10	11	
Collectorates.	Number of Circles as shown in the Map.	Name of Circle.	Population.	Date of first Case of Cholera in the Circle during the year.	Date of last Case of Cholera in the Circle during the year.	Total Deaths from Cholera in the Circle during the year.	Ratio per 10,000	Period of Maximum Intensity of the Disease. From	To	Number of Villages in each of the Rural Circles.	Number of those Affected by Cholera.	Number of those Not Affected by Cholera.
Násik ..	26	Násik .. R. C.	67,910	1st February 1885.	29th August 1885.	415	61·11	February 1885.	February 1885	135	38	97
	27	Sinnar	66,081	....	28th	156	23·61	May ..	May ..	99	12	87
	28	Igatpuri	65,749	22nd February ..	20th	102	14·84	July ..	August ..	128	11	117
	29	Dindori	72,290	22nd	19th September ..	256	35·41	June ..	July ..	128	19	109
	30	Niphád	87,523	18th	15th	624	71·29	August ..	August ..	121	41	80
	31	Chándor	50,899	4th June ..	21st October ..	77	15·13	June ..	June ..	108	9	99
	32	Yeola or Sawargaon	35,597	17th	31st	210	59·05	August ..	August ..	117	16	101
	33	Nándgaon	30,399	23rd March ..	17th November ..	65	21·38	June ..	July ..	88	8	80
	34	Málegaon	74,718	3rd	21st December ..	139	18·60	April ..	April ..	144	11	133
	35	Báglán	64,875	12th	24th October ..	140	21·58	March ..	March ..	155	20	135
	36	Kalvan	58,456	1st June ..	.. ..	138	23·59	June ..	June ..	187	11	176
	37	Násik .. T. C.	24,101	4th February ..	16th September ..	395	163·89	.. ..	.. ..	..	..	..
	38	Málegaon .. Ct.	3,780	8th April ..	12th December ..	20	52·90	May ..	July ..	..	..	..
Thána ..	39	Dáhánu .. R. C.	109,322	22nd February ..	21st September ..	30	2·76	April ..	April ..	..	..	..
	40	Máhim	77,360	7th	8th November ..	110	14·22	August ..	September ..	209	4	205
	41	Váda	36,493	19th February ..	29th September ..	132	36·17	June ..	June ..	186	8	178
	42	Sháhápur	107,729	3rd January ..	12th November ..	245	22·74	July ..	July ..	153	9	144
	43	Murbád	63,934	1st	22nd October ..	186	29·09	.. ..	.. ..	275	20	255
	44	Kalyán	65,078	1st	4th September ..	501	77·14	May ..	May ..	171	20	151
	45	Bhiwndi	75,363	3rd	19th November ..	524	69·53	June ..	June ..	222	31	191
	46	Bassein	66,967	21st February ..	28th September ..	110	15·95	.. ..	.. ..	194	30	164
	47	Sálsette	93,893	10th April ..	22nd	158	16·86	March ..	March ..	92	12	80
	48	Karjat	89,062	1st January ..	5th	305	37·17	August ..	August ..	112	14	98
	49	Thána .. T. C.	14,456	26th February ..	15th	132	91·21	January ..	January ..	208	26	242
	50	Kalyán	12,910	1st January ..	1st August ..	156	120·84	June ..	June ..	..	..	..
Bombay City ..	51	Bombay (City) .. T. C.	773,196	2nd January ..	13th December ..	581	7·51	.. ..	.. ..	..	..	..
Kolába ..	52	Panvel .. R. C.	90,830	6th January ..	3rd August ..	298	32·81	March ..	March ..	218	15	203
	53	Alibág	69,762	20th February ..	11th April ..	53	7·59	January ..	January ..	171	6	165
	54	Pen	70,200	23rd	20th	98	14·67	March ..	March ..	199	7	192
	55	Roha Nágothna		22nd December ..	29th December ..	5		.. ..	.. ..			
	56	Roha	44,835	23rd February ..	3rd August ..	46	10·26	December ..	December ..	133	2	131
	57	Mángáon	81,085	13th May ..	3rd July ..	430	53·03	June ..	July ..	225	6	219
	58	Panvel .. T. C.	10,351	11th June ..	16th June ..	45	43·43	May ..	June ..	..	..	..
Nagar ..	59	Nagar .. R. C.	71,458	20th March ..	28th August ..	10	1·40	June ..	June ..	..	..	..
	60	Akola	60,000	21st June ..	30th June ..	4	0·66	July ..	July ..	108	3	105
	61	Jámkhed	60,960	6th May ..	30th October ..	168	27·56	June ..	June ..	158	2	154
	62	Párner	73,701	8th	30th September ..	76	10·32	July ..	July ..	75	20	55
	63	Shrigonda	81,291	27th July ..	22nd November ..	14	2·73	September ..	September ..	122	8	114
	64	Karjat	84,870	22nd	27th October ..	25	7·18	.. ..	.. ..	84	4	80
	65	Nevása	78,158	14th June ..	3rd	232	29·68	August ..	August ..	79	5	74
	66	Kopargaon	63,739	8th April ..	27th September ..	116	18·19	July ..	July ..	145	32	113
	67	Sangamner	59,561	12th May ..	28th	91	15·28	.. ..	.. ..	121	8	113
	68	Ráhuri	63,289	25th	16th August ..	56	8·85	August ..	August ..	151	11	140
	69	Shevgaon	87,113	6th March ..	12th October ..	287	32·94	July ..	July ..	111	11	100
	70	Ahmednagar .. T. C.	32,903	25th April ..	30th August ..	17	5·16	May ..	May ..	180	35	145
	71	Sangamner	8,796	21st June ..	24th	31	35·24	August ..	August ..	..	..	..
	72	Ahmednagar .. Ct.	4,589	21st August ..	21st	5	10·89	.. ..	.. ..	..	..	..
Poona ..	73	Junnar .. R. C.	91,000	21st January ..	11th September ..	381	41·46	.. ..	.. ..	..	..	..
	74	Indápur	48,114	25th July ..	30th November ..	120	24·94	July ..	July ..	153	46	107
	75	Khed	141,800	1st March ..	8th	947	66·74	October ..	October ..	86	18	68
	76	Sirúr	72,793	9th April ..	13th	433	59·43	August ..	August ..	244	65	179
	77	Purandhar	75,678	16th March ..	15th October ..	67	8·85	October ..	October ..	76	28	48
	78	Bhimthadi	110,428	16th April ..	3rd November ..	155	14·04	August ..	August ..	92	8	84
	79	Haveli	150,059	5th January ..	31st December ..	314	20·92	October ..	October ..	29	28	101
	80	Mával	62,383	6th March ..	19th June ..	77	12·34	July ..	July ..	237	37	200
	81	Poona (City) .. T. C.	99,022	20th February ..	31st December ..	144	14·45	March ..	March ..	164	7	157
	82	Kirkee .. Ct.	3,560	25th October ..	25th October ..	1	2·81	December ..	December ..	..	..	..
Sholápur ..	83	Sholápur .. R. C.	89,649	19th July ..	30th November ..	149	16·62	October ..	October ..	..	..	..
	84	Barsi	93,920	26th	31st December ..	197	20·98	August ..	August ..	146	27	119
	85	Mádha	67,961	18th	22nd	191	28·14	.. ..	.. ..	122	24	98
	86	Karmála	61,548	12th	.. .. ..	272	44·19	July ..	July ..	89	23	66
	87	Pandharpur	55,302	12th May ..	7th	354	63·65	August ..	August ..	123	36	87
	88	Sángola	62,849	21st	16th	242	38·56	July ..	July ..	84	33	51
	89	Máloshas	58,332	20th July ..	8th December ..	407	69·78	.. ..	.. ..	76	29	47
	90	Sholápur .. T. C.	50,896	26th	18th November ..	29	4·84	August ..	August ..	69	30	39
	91	Barsi	16,126	26th	31st August ..	38	23·56	.. ..	.. ..	..	..	..
	92	Pandharpur	16,910	18th June ..	24th November ..	480	283·85	.. ..	.. ..	..	..	..
Sátára ..	93	Sátára .. R. C.	90,885	29th	28th November ..	153	16·83	July ..	July ..	..	..	..
	94	Jávli	60,481	1st August ..	25th September ..	29	4·79	October ..	October ..	147	30	117
	95	Wái	76,934	18th March ..	31st December ..	199	25·87	September ..	September ..	252	1	251
	96	Karád	130,142	24th June ..	31st October ..	612	47·03	October ..	October ..	124	27	97
	97	Váhra	169,408	4th July ..	30th November ..	361	21·31	July ..	July ..	103	44	59
	98	Tásgaon	79,704	19th	31st August ..	132	16·56	.. ..	.. ..	136	23	113
	99	Khánápur	80,327	11th	30th November ..	271	33·73	.. ..	.. ..	49	21	28
	100	Khatáv	74,027	6th	14th	328	44·31	August ..	August ..	91	30	61
	101	Mán	52,111	25th	30th	293	56·22	.. ..	.. ..	84	22	62
	102	Koregaon	81,187	21st	30th December ..	198	24·39	October ..	October ..	78	28	50
	103	Pátan	112,414	27th June ..	26th September ..	343	30·06	September ..	September ..	74	26	48
	104	Sátára .. T. C.	29,928	11th July ..	26th October ..	13	4·27	August ..	August ..	292	25	117
	105	Karád	10,778	21st June ..	17th	127	117·83	.. ..	.. ..	..	..	..
	106	Wái	11,676	19th October ..	....	88	75·37	July ..	July ..	..	..	..
Ratnágiri	107	Málvan .. R. C.	109,953	11th January ..	27th January ..	7	0·64	November ..	November ..	..	..	..
	108	Sangameshvar	104,640	17th November ..	27th November ..	6	0·57	January ..	January ..	67	2	65
	109	Chiplún	148,921	29th January ..	23rd August ..	18	1·06	November ..	November ..	179	1	178
	110	Khed	91,492	4th July ..	23rd July ..	34	3·72	August ..	August ..	212	3	209
	111	Dápoli	141,012	22nd February ..	22nd September ..	68	4·11	July ..	July ..	146	3	143
								March ..	April ..	247	7	240

1	2	3	4	5	6	7	8	9		10	11	
Collectorates.	Number of Circles as shown in the Map.	Name of Circle.	Population.	Date of first Case of Cholera in the Circle during the year.	Date of last Case of Cholera in the Circle during the year.	Total Deaths from Cholera in the Circle during the year.	Ratio per 10,000	Period of Maximum Intensity of the Disease. From	To	Number of Villages in each of the Rural Circles.	Number of those Affected by Cholera.	Not Affected by Cholera.
Belgaum ..	112	Belgaum .. R. C.	95,780	1st January 1885.	31st August 1885.	278	29·02	May 1885.	May 1885.	199	22	177
	113	Sampgaon .. "	119,843	1st " "	12th September "	1,576	131·50	" "	" "	123	58	65
	114	Bidi or Khánápur "	79,264	3rd " "	30th June "	238	30·03	June "	June "	219	21	198
	115	Chikodi .. "	245,614	20th April "	27th August "	661	26·91	" "	" "	213	46	167
	116	Parasgad .. "	91,826	11th January "	12th " "	316	34·41	" "	" "	127	35	92
	117	Gokák .. "	82,722	23rd " "	30th September "	246	29·74	" "	" "	113	25	88
	118	Athni .. "	94,775	11th June "	8th November "	216	22·80	" "	" "	80	18	62
	119	Belgaum .. T. C.	23,115	4th May "	20th September "	72	31·15	May "	May "	..	..	..
	120	Gokák .. "	10,307	21st " "	8th October "	135	131·09	June "	June "	..	..	..
	121	Belgaum .. Ct.	9,582	3rd " "	5th " "	11	11·48	May "	May "	..	..	..
Dhárwár ..	122	Dhárwár .. R. C.	83,946	18th February "	12th September "	569	107·21	June "	June "	127	42	63
	123	Mugód Petha .. "		8th March "	23rd August "	821		May "	May "		17	67
	124	Hubli .. "	55,320	7th June "	11th July "	58	10·48	June "	June "	70	3	
	125	Navalgund .. "	87,832	27th May "	9th September "	86	12·30	July "	July "	89	14	77
	126	Nargund .. "		9th June "	8th July "	22		June "	June "		8	
	127	Kalghatgi .. "	50,769	18th May "	31st August "	23	4·51	August "	August "	165	8	97
	128	Bankápur .. "	76,554	16th June "	16th October "	57	7·44	" "	" "	142	9	133
	129	Ron .. "	60,724	14th " "	24th July "	3	0·49	June "	June "	59	1	58
	130	Karajgi .. "	85,216	18th July "	31st August "	17	2·04	August "	August "	130	6	124
	131	Kod .. "	80,345	2nd August "	12th " "	12	1·49	" "	" "	177	1	176
	132	Dhárwár .. T. C.	27,191	19th February "	5th September "	122	44·82	June "	June "	..	..	..
	133	Hubli .. "	36,677	15th May "	14th August "	54	14·72	" "	" "	..	..	..
Bijápur ..	134	Indi .. R. C.	71,940	20th January "	17th " "	4	0·58	January "	January "	121	2	119
	135	Muddebihál .. "	65,024	17th July "	21st " "	47	7·23	August "	August "	149	5	144
	136	Sindgi .. "	72,650	3rd December "	5th December "	1	0·14	" "	" "	141	1	140
	137	Bágevádi .. "	86,743	28th July "	30th November "	52	3·69	December "	December "	120	6	114
	138	Bijápur .. "	76,896	22nd " "	25th " "	91	11·83	November "	November "	82	15	67
	139	Bágalkot .. "	59,123	17th June "	28th September "	81	9·09	October "	October "	162	15	147
	140	Bádámi .. "	89,047	7th " "	17th October "	126	14·15	July "	July "	195	16	179
	141	Hungund .. "	80,037	19th " "	31st July "	21	2·62	" "	" "	160	6	154
	142	Kaládgi .. T. C.	7,024	6th July "	7th " "	2	2·85	" "	" "	..	..	..
Kánara ..	143	Kárwár .. R. C.	33,981	9th June "	16th June "	4	1·18	June "	June "	51	2	49
	144	Sirsi .. "	62,400	5th December "	5th December "	1	0·16	December "	December "	288	1	287
	145	Mundgod Petha .. "	17,685	26th May "	3rd July "	52	29·40	June "	June "	75	2	73
	146	Haliyál .. "	61,154	1st January "	22nd " "	271	45·62	May "	May "	216	24	188
	147	Supa Petha .. "		1st March "	19th June "	8		June "	June "		4	
Surat ..	148	Olpád .. R. C.	62,949	21st March	12th July "	82	13·21	" "	" "	120	17	103
	149	Mándvi .. "	56,810	15th May "	30th September "	8	1·37	September "	September "	141	2	139
	150	Chorási .. "	44,764	30th March "	1st October "	100	24·35	April "	April "	66	17	49
	151	Bárdoli .. "	76,100	19th February "	28th " "	58	7·62	May "	May "	124	12	112
	152	Jaláper .. "	74,016	23rd " "	26th November "	50	6·75	" "	" "	91	17	74
	153	Chikli .. "	60,147	20th April "	8th May "	20	3·33	November "	November "	62	3	59
	154	Bulsár .. "	67,478	7th August "	13th August "	5	0·74	April "	April "	98	1	97
	155	Surat (City) .. T. C.	709,844	7th March "	19th July "	314	28·59	August "	August "	..	..	..
Broach ..	156	Broach .. R. C.	73,230	23rd May "	21st October "	55	7·51	April "	April "	104	7	97
	157	Yágra .. "	33,902	14th June "	29th June "	9	2·66	August "	August "	69	3	66
	158	A'nod .. "	39,641	1st " "	13th September "	104	26·23	June "	June "	48	14	34
	159	Jambusar .. "	66,293	6th July "	15th July "	6	0·90	" "	" "	82	3	82
	160	Ankleswar .. "	65,054	9th March "	24th September "	11	2·15	July "	July "	106	7	89
	161	Hánsot .. "		26th " "	2nd June "	3		" "	" "		4	
								March "	March "			
								May "	May "			
								June "	June "			
	162	Broach T. C.	37,281	2nd June "	28th October "	22	5·90	October "	October "	..	..	..
Kaira ..	163	Mehmadabad .. R. C.	76,296	18th July "	19th August "	8	1·05	July "	July "	59	2	57
	164	Nadiád .. "	133,952	20th February "	21st September "	116	8·66	August "	August "	92	9	83
	165	Borsad .. "	131,003	24th May "	2nd November "	136	10·37	June "	June "	89	12	77
	166	A'nand .. "	154,118	9th April "	13th October "	33	2·14	April "	April "	74	7	67
	167	Thásra .. "	84,866	30th June "	26th September "	40	4·71	July "	July "	97	5	92
	168	Mátar .. "	78,279	24th " "	16th August "	13	1·66	" "	" "	81	4	77
	169	Kaira .. T. C.	13,840	11th July "	14th " "	21	15·61	" "	" "	..	..	..
	170	Nadiád .. "	28,304	4th August "	10th September "	17	6·01	August "	August "	..	..	..
	171	Borsad .. "	12,228	17th June "	15th August "	9	7·36	June "	June "	..	..	..
Panch Mahals.	172	Godhra .. R. C.	64,976	29th July "	8th August "	9	1·40	August "	August "	232	6	226
	173	Káloi .. "	43,269	19th June "	19th July "	37	8·55	July "	July "	66	5	61
	174	Háloi .. "	33,253	9th April "	15th " "	54	16·24	May "	May "	156	9	147
	175	Godhra .. T. C.	13,342	13th August "	19th September "	14	10·49	August "	August "	..	..	..
Ahmedabad ..	176	Daskroi .. R. C.	143,942	26th July "	24th October "	13	0·90	July "	July "	137	2	135
	177	Paránti .. "	107,534	1st October "	20th November "	66	6·13	November "	November "	161	11	150
	178	Dholka .. "	93,476	13th April "	25th April "	6	0·64	April "	April "	117	2	115
	179	Ahmedabad .. T. C.	124,787	18th June "	8th September "	49	3·93	August "	August "	..	..	..
	180	Dholka .. "	17,716	20th April "	30th " "	41	23·14	September "	September "	..	..	..
	181	Ahmedabad .. Ct.	1,940	17th August "	17th August "	1	5·16	August "	August "	..	..	..
Karáchi ..	182	Karáchi .. R. C.	20,256	9th June "	24th " "	177	87·38	June "	June "	Information not available in the Census Report.	27	Vide Remark in Column 10.
	183	Dádú .. "	121,138	12th " "	2nd " "	467	65·95	July "	July "		64	
	184	Juhi .. "		1st July "	28th September "	109		" "	" "		23	
	185	Sehwan .. "		6th January "	7th August "	228		" "	" "		44	
	186	Mánjhand .. "	18,952	4th June "	4th " "	175	92·34	" "	" "		19	
	187	Kotri .. "	24,870	25th " "	21th July "	19	7·64	" "	" "		5	
	188	Tatta .. "	39,750	29th May "	6th August "	622	156·43	" "	" "		103	
	189	Sókro .. "	21,711	29th January "	14th July "	593	273·13	June "	June "		110	
	190	Ghorshári .. "	34,350	3rd " "	21st " "	397	115·54	March "	March "		76	
	191	Mirpur Batoro .. "	32,170	8th June "	6th August "	283	81·73	June "	June "		61	
	192	Belo or Sujáwal .. "	30,314	10th April "	" " "	396	130·63	July "	July "		67	
	193	Jatti .. "	27,055	18th January "	15th July "	225	83·16	" "	June "		52	
	194	Shahbandar .. "	27,814	2nd " "	18th " "	695	249·87	" "	" "		109	
	195	Karáchi .. T. C.	68,332	7th June "	25th September "	188	27·51	June "	" "		..	

1	2	3	4	5	6	7	8	9		10	11	
Collectorates.	Number of Circles as shown in the Map.	Name of Circle.	Population.	Date of first Case of Cholera in the Circle during the year.	Date of last Case of Cholera in the Circle during the year.	Total Deaths from Cholera in the Circle during the year.	Ratio per 10,000.	Period of Maximum Intensity of the Disease. From	To	Number of Villages in each of the Rural Circles.	Number of those Affected by Cholera.	Number of those Not affected by Cholera.
Hyderabad	196	Hyderabad .. R. C.	57,830	1st June 1885.	31st July 1885.	631	109·17	July 1885.	July 1885.	Information not available in the Census Report.	67	Vide Remark in Column 10.
	197	Guni or Tanda .. "	71,162	29th March "	23rd " "	342	48·04	" "	" "		83	
	198	Badin .. "	65,703	3rd May "	4th July "	12	1·83	" "	" "		8	
	199	Tando Bago .. "	55,473	27th April "	16th " "	67	12·08	" "	" "		26	
	200	Dero Mohbat .. "	37,260	10th May "	27th " "	289	77·56	June "	June "		48	
	201	Hâlla .. "	78,149	23rd June "	20th " "	43	5·52	July "	July "		7	
	202	Tando Alahyar .. "	66,125	12th May "	28th " "	394	59·58	June "	June "		44	
	203	Shahdâdpur .. "	55,593	18th June "	6th August "	84	15·11	July "	July "		14	
	204	Mirpur Khás .. "	24,979	5th " "	24th July "	187	74·86	June "	June "		32	
	205	Kandiâro .. "	39,336	17th " "	10th August "	64	16·27	July "	July "		18	
	206	Nausbahro .. "	61,295	12th " "	16th " "	210	34·26	" "	" "		55	
	207	Moro .. "	44,443	24th " "	18th " "	247	55·58	" "	" "		31	
	208	Sakrand .. "	52,075	21st " "	9th " "	279	53·58	" "	" "		50	
	209	Hyderabad .. T. C.	46,195	5th " "	21st " "	171	37·03	" "	" "		..	
Thar and Pârkar	210	Umarkot .. R. C.	38,807	13th June "	24th July "	75	19·33	" "	" "		16	
	211	Khipra .. "	26,079	17th " "	9th August "	51	19·56	" "	" "		12	
	212	Umarkot .. T. C.	2,823	26th " "	2nd July "	2	7·07	June "	" "		..	
Shikârpur	213	Shikârpur .. R. C.	32,616	27th June "	18th August "	99	30·35	July "	July "		14	
	214	Sukkur .. "	51,238	3rd " "	29th July "	1,214	236·93	June "	June "		80	
	215	Naushahro .. "	55,723	16th " "	12th August "	193	34·63	July "	July "		17	
	216	Rôhri .. "	68,582	3rd " "	26th July "	159	23·19	" "	" "		17	
	217	Ghotki .. "	61,502	9th " "	31st " "	105	17·07	" "	" "		10	
	218	Mirpur .. "	39,112	27th July "	6th August "	6	1·54	August "	August "		3	
	219	Ubauro .. "	39,918	7th " "	28th November "	199	49·85	" "	" "		24	
	220	Lárkhána .. "	83,952	13th June "	30th July "	79	9·41	July "	July "		4	
	221	Kambar .. "	151,489	19th " "	2nd September "	291	37·49	" "	" "		18	
	222	Rato-dero .. "		13th " "	19th August "	241		" "	" "		15	
	223	Shahdâdpur .. "		24th " "	11th July "	36		June "	June "		4	
	224	Labdarya .. "	135,968	5th " "	21st " "	64	20·75	" "	" "		23	
	225	Mehar .. "		18th " "	18th " "	195		July "	July "		37	
	226	Nasirabad .. "		19th " "	26th June "	23		June "	June "		2	
	227	Kakar .. "	49,500	21st " "	20th July "	237	47·88	July "	July "		44	
	228	Shikârpur .. T. C.	42,496	21st May "	1st August "	45	10·59	" "	" "		..	
	229	Sukkur .. "	27,389	3rd June "	11th October "	222	81·05	June "	June "		..	
	230	Lárkhána .. "	13,188	20th " "	20th July "	2	1·51	" "	July "		..	
Upper Sind Frontier	231	Jacobabad .. R. C.	25,972	24th May "	31st August "	107	41·28	June "	June "		13	
	232	Thul .. "	43,025	21st June "	" " "	271	62·99	August "	August "		36	
	233	Kashmor .. "	43,832	26th " "	31st July "	162	36·96	July "	July "		18	
	234	Jacobabad .. T. C.	11,352	2nd " "	19th August "	72	63·42	June "	June "		..	

66. The map illustrates the distribution of, and mortality from cholera in the different registration circles in which the disease prevailed. As usual a statement is embodied for easy reference, showing in each district the area, population, density per square mile, number of registration circles and villages, deaths from different causes, birth and death ratios, and dates of the first and last cases of cholera. The map has also been coloured in different shades of green according as a high or low death-rate obtained in the affected districts.

Cholera Map.

67. In conclusion, putting aside for the present all questions as to the etiology of cholera, the lesson to be learnt from this epidemic is that all measures taken at the time of an outbreak of cholera can only be palliative. The real remedy is to insist on sanitary measures being introduced so as to ensure cleanliness in every village at all times irrespective of epidemic times or seasons. If this were only understood, and acted upon, cholera and other diseases would lose their intensity, but nothing short of this action will prevent epidemics.

Conclusion.

SMALL-POX.

68. During 1885, the deaths from small-pox of 1,364 males and 1,282 females, or a total of 2,646 persons were recorded against 14,438 in 1884 and a decennial mean of 7,923..

Small-pox mortality by sexes.

69. The number of deaths registered from this disease in each year since 1874 is as follows:—

Small-pox deaths since 1874.

Years.	Number of Deaths.	Years.	Number of Deaths.
1874	3,903	1880...	940
1875	3,461	1881...	539
1876	11,817	1882...	1,630
1877	27,369	1883...	13,404
1878	4,475	1884...	14,438
1879	1,156	1885...	2,646
Total ...	52,181	Total ...	33,597

There is a decrease in the second period ending 1885; and the number of deaths in 1885 compared with the number of deaths in the previous two years (1884 and 1883) shows a marked decrease of 11,792 and 10,758, but compared with 1880, 1881, and 1882, the results are not favourable, though not unsatisfactory.

Deaths by Districts and Collectorates.

70. The following table shows the deaths during 1885 arranged according to Registration Districts and Collectorates :—

Districts.	Number.	Collectorates.	Population according to Census of 1881.	Deaths from Small-pox in: Mean for 10 years from 1875 to 1884.	Ratio per 1,000 of Population.	1884.	Ratio per 1,000 of Population on Census of 1881.	1885.	Ratio per 1,000 of Population on Census of 1881.
Western Registration District.	1	Khándesh	1,237,221	1,017	0·91	96	0·08	48	0·04
	2	Násik	781,206	557	0·74	599	0·77	81	0·10
	3	Thána	807,367	452	0·58	524	0·65	101	0·13
	4	Bombay	773,196	705	1·01	112	0·14	61	0·08
	5	Kolába	482,830	214	0·47	283	0·59	188	0·39
Central Registration District.	6	Ahmednagar	751,228	280	0·37	50	0·07	33	0·05
	7	Poona	900,621	449	0·50	302	0·34	262	0·29
	8	Sholápur	582,437	168	0·25	364	0·62	80	0·14
	9	Sátára	1,062,350	284	0·27	1,217	1·15	42	0·04
	10	Ratnágiri	997,090	489	0·48	1,171	1·17	162	0·16
Southern Registration District.	11	Belgaum	864,014	569	0·62	2,486	2·87	144	0·17
	12	Dhárwár	882,907	645	0·68	2,543	2·88	429	0·49
	13	Bijápur	638,493	361	0·48	1,800	2·82	59	0·09
	14	Kánara	421,840	222	0·54	1,306	3·10	263	0·62
Eastern Gujarát Registration District.	15	Surat	614,198	447	0·73	63	0·10	1	0·00
	16	Broach	326,930	133	0·40	11	0·03	1	0·00
	17	Kaira	804,800	206	0·26	133	0·17	129	0·16
	18	Panch Mahále	256,479	44	0·18	74	0·29	15	0·06
	19	Ahmedabad	856,324	206	0·25	260	0·30	17	0·02
Sind Registration District.	20	Karáchi	478,688	96	0·21	750	0·41	272	0·57
	21	Hyderabad	754,624	211	0·29	196	0·99	125	0·17
	22	Thar and Párkar	203,344	15	0·08	53	0·26	8	0·04
	23	Shikárpur	852,986	131	0·16	28	0·03	98	0·11
	24	Upper Sind Frontier	124,181	17	0·16	6	0·05	27	0·22

ABSTRACT.

Western Registration District	4,081,820	2,945	0·78	1,614	0·29	479	0·12
Central "	4,293,776	1,670	0·38	3,110	0·72	579	0·13
Southern "	2,897,254	1,797	0·60	8,135	2·90	895	0·32
Eastern Gujarát "	2,857,731	1,041	0·37	546	0·19	163	0·06
Sind "	2,413,823	470	0·21	1,033	0·43	530	0·22
Presidency	16,454,414	7,923	0·49	14,438	0·88	2,646	0·16

By Districts.

From the above table it will be noticed that small-pox was present in all the districts, but in none in an epidemic form. The highest ratio 0·32 was recorded in the Southern Registration District against 2·90 in 1884 and a decennial mean of 0·60. In the Sind Registration District there was a ratio of 0·22 against 0·43 in the previous year, and 0·21 the decennial mean. In the Central, Western, and Eastern Gujarát Registration Districts, the ratios per 1,000 of population were respectively 0·13, 0·12 and 0·06. According to Collectorates the highest ratios 0·62 and 0·57 took

By Collectorates.

place respectively in Kánara and Karáchi Collectorates, and the low ratio 0·04 was recorded in two Collectorates, *viz.* Khándesh and Thar and Párkar, and in Ahmedabad only 0·02. In Surat and Broach Collectorates there was only 1 death in each. In only two Collectorates, *viz.* Shikárpur and Upper Sind Frontier, was the number of deaths and their ratios greater during the year than in 1884. The Presidency rate being 0·16 against 0·88 in 1884.

Death-rates in Urban and Rural Population.

71. Proceeding still further with the analysis of the localities in which these deaths from small-pox occurred, as in the following table, we find that in the urban registration circles with a population of 2,105,756 persons, the millesimal death-rate from small-pox was 0·16 against 0·58 during the previous year, whilst in the rural circles with a population of 14,348,658 persons the rate was 0·16 against 0·92 in the previous year :—

Collectorates.	Urban and Rural.	Population.	1884.	1885.
Khándesh	Urban ...	49,465	...	...
	Rural ...	1,187,766	0·08	0·04
Násik	Urban ...	48,535	0·58	0·02
	Rural ...	732,671	0·78	0·10
Thána	Urban ...	27,366	0·04	...
	Rural ...	780,001	0·67	0·13
Bombay	Urban ...	773,196	0·14	0·08
	Rural ...	.....	...	...
Kolába	Urban ...	23,531	0·60	0·04
	Rural ...	459,299	0·58	0·41
Ahmednagar	Urban ...	46,288	...	0·13
	Rural ...	704,940	0·07	0·04
Poona	Urban ...	147,376	0·11	1·25
	Rural ...	753,245	0·39	0·10
Sholápur	Urban ...	92,926	1·68	...
	Rural ...	489,561	0·42	0·16
Sátára	Urban ...	51,482	1·53	0·04
	Rural ...	1,010,868	1·12	0·04
Ratnágiri	Urban ...	21,563	6·17	0·05
	Rural ...	975,527	1·06	0·16
Belgaum	Urban ...	54,190	3·40	0·02
	Rural ...	809,824	2·84	0·18
Dhárwár	Urban ...	91,071	2·62	0·12
	Rural ...	791,836	2·92	0·53
Bijápur	Urban ...	7,024	4·70	...
	Rural ...	631,469	2·80	0·09
Kánara	Urban ...	24,890	5·33	0·24
	Rural ...	397,450	2·96	0·65
Surat	Urban ...	123,073	...	0·01
	Rural ...	491,125	0·13	...
Broach	Urban ...	48,760	...	...
	Rural ...	278,170	0·04	0·00
Kaira	Urban ...	67,614	0·64	0·16
	Rural ...	737,186	0·12	0·16
Panch Maháls	Urban ...	25,736	0·62	0·27
	Rural ...	229,743	0·25	0·04
Ahmedabad	Urban ...	171,390	0·16	...
	Rural ...	684,934	0·34	0·02
Karáchi	Urban ...	68,332	0·10	0·04
	Rural ...	4,10,356	0·46	0·65
Hyderabad	Urban ...	45,195	0·24	0·20
	Rural ...	709,429	1·04	0·16
Thar and Párkar	Urban ...	2,828	...	...
	Rural ...	200,516	0·26	0·04
Shikárpur	Urban ...	83,073	0·04	0·34
	Rural ...	769,913	0·03	0·09
Upper Sind Frontier	Urban ...	11,352	0·09	0·09
	Rural ...	112,829	0·04	0·23
Presidency ...	Urban ...	2,105,756	0·58	0·16
	Rural ...	14,348,658	0·92	0·16

Death-rate in Towns and Cantonments compared with Collectorates.

72. Localizing the diseases till further the following table shows the death-rates in each town and cantonment circle. Out of 62 towns and cantonments only 21 towns and 2 cantonments were affected by this disease and amongst them the city of Poona heads the list with a ratio of 1·84 per 1,000 of population, the zilla rate being only 0·29. Borsad in the Kaira Collectorate comes next with a ratio of 0·65, the zilla rate being 0·16. The remaining 21 towns and cantonments have their ratios ranging downwards from 0·56 in the Dohad town to 0·03 in the Sátára.

Collectorates.	Death-rate from Small-pox by Zillas in 1885.	Town Circles and Cantonment Circles.	Death-rate of Towns and Cantonments in 1885.
Khándesh	0·04	Dhulia	...
		Nandurbár	...
		Chopda	...
		Nasirabad	...
Násik	0·10	Násik	0·04
		Yeola	...
		Devláli Cantonment	...
		Málegaon do.	...
Thána	0·13	Thána	...
		Kalyán	...
Bombay	0·08	Bombay	0·08
Kolába	0·39	Panvel	...
		Alíbág	...
		Mahád	0·15
Ahmednagar	0·05	Ahmednagar	0·06
		Sangamner	0·45
		Ahmednagar Cantonment... ...	...
Poona	0·29	Poona	1·84
		Junnar	...
		Poona Cantonment	0·04
		Kirkee do.	...
Sholápur	0·14	Sholápur	...
		Bársi	...
		Pandharpur	...
Sátára	0·04	Sátára	0·03
		Karád	...
		Wái	0·09
Ratnágiri	0·16	Vengúrla	...
		Ratnágiri	0·08
Belgaum	0·17	Belgaum	...
		Gokák	...
		Athni	0·09
		Belgaum Cantonment	...
Dhárwár	0·49	Dhárwár	0·12
		Hubli	0·22
		Gadag-Bettigeri	...
		Ránebennur	...
Bijápur	0·09	Kaládgi	...
Kánara	0·62	Kárwár	0·29
		Kumta	0·19
Surat	...	Surat	0·00
		Bulsár	...
Broach	...	Broach	...
		Jambusar	...
Kaira	0·16	Kaira	0·24
		Nadiád	...
		Borsad	0·65
		Kapadvanj	...
Panch Mahals	0·06	Godhra	...
		Dohad	0·56
Ahmedabad	0·02	Ahmedabad	...
		Gogha	...
		Viramgám	...
		Dholka	...
		Ahmedabad Cantonment	...
Karáchi	0·57	Karáchi	0·04
Hyderabad	0·17	Hyderabad	0·20
Thar and Párkar	0·04	Umarkot	...
Shikárpur	0·11	Shikárpur	0·52
		Sukkur	0·22
		Lárkhána	...
Upper Sind Frontier	0·22	Jacobabad Town and Cantonment Circle.	0·09

Deaths by ages.

73. In the following table the deaths are shown by age and months, the latter being contrasted with the corresponding months of 1884 and with the mean of the previous five years. In 1885, 22·0 per cent. of these deaths occurred among infants under one year of age, whilst 32·7 per cent. took place among children over 1 and under 12, the remaining 45·3 per cent. being among persons over that age :—

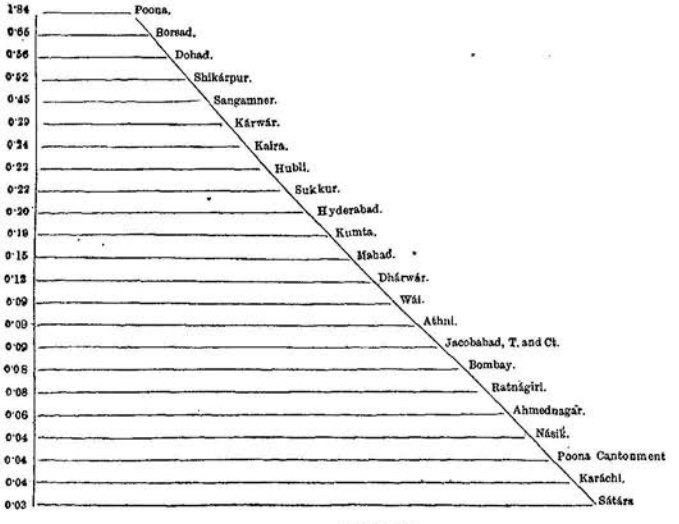
		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Total deaths from Small-pox in each month.	5 years' mean ..	604	884	1,113	987	694	508	331	224	167	125	178	375	6,190
	1884	1,835	2,211	2,413	2,564	1,856	1,387	812	500	328	200	223	309	14,438
	1885	353	383	500	421	341	274	112	86	36	33	44	63	2,646
Deaths under 1 year.	5 years' mean ..	190	257	351	306	199	118	79	58	46	34	42	97	1,777
	1884	574	601	696	662	486	260	147	93	66	40	39	59	3,723
	1885	73	97	106	99	82	51	22	24	4	7	8	9	582
Above 1 and under 12 years.	5 years' mean ..	290	416	521	440	297	179	126	92	69	49	64	164	2,707
	1884	820	888	886	887	693	374	320	180	115	79	58	123	5,423
	1885	125	119	157	151	123	99	40	14	3	3	11	19	864
Above 12 years ..	5 years' mean ..	124	211	241	241	198	211	126	74	52	42	72	114	1,706
	1884	441	722	831	815	677	753	815	227	147	81	126	127	5,292
	1885	155	167	237	171	136	124	50	48	29	28	25	35	1,400

Monthly Distribution.

74. In December 1884, 309 deaths were registered throughout the Presidency and in January 1885 the number rose to 353, and reached its maximum intensity (500) in March. The disease then commenced to decline and the minimum (33) was registered in October, but the setting in of the cold weather, as usual, appeared to favour the development of the poison, as the deaths from small-pox rose in December to 63, or 30 above the number recorded in the month of October.

Small-pox Diagram.

75. The following diagram shows at a glance the death-rate from small-pox in each town and cantonment in the Presidency arranged in sequence from highest to lowest rate :—



FEVER.

Fever Mortality by Sexes.

76. During 1885, 163,561 males and 150,676 females, or a total of 314,237 persons were reported to have died from fever. The increase, therefore, for the year under report as compared with 1884 amounted to 37,248 deaths, the mean for the previous ten years being 272,712.

Deaths since 1874.

77. The number of deaths registered from fever in each year since 1874 is as follows:—

Years.	Number of Deaths from Fever.	Years.	Number of Deaths from Fever.
1874	183,717	1880...	246,779
1875	219,156	1881...	272,403
1876	220,833	1882...	243,454
1877	336,865	1883...	266,741
1878	357,376	1884...	276,989
1879	286,526	1885...	314,237
Total for six years ...	1,604,473	Total for six years ...	1,620,603
Means ...	267,412	Means ...	270,100

The total deaths from fever in the six years ending 1885 is greater by 16,130 than the aggregate deaths from this disease in the first six years.

Deaths by Districts and Collectorates.

78. In the following table these deaths are shown by Districts and Collectorates:—

Districts.	Number.	Collectorates.	Population according to Census of 1881.	Deaths from Fever in: Mean for 10 years from 1875 to 1884.	Ratio per 1,000 of Population.	1884.	Ratio per 1,000 of Population on Census of 1881.	1885.	Ratio per 1,000 of Population on Census of 1881.
Western Registration District.	1	Khándesh	1,237,231	19,957	17·95	21,367	17·27	27,315	22·08
	2	Násik	781,206	14,506	19·26	14,484	18·54	20,178	25·83
	3	Thána	807,307	13,488	17·36	15,545	19·63	16,150	20·00
	4	Bombay	773,196	7,995	10·63	6,861	8·80	6,479	8·38
	5	Kolába	483,830	6,424	14·03	7,607	15·76	7,292	15·10
Central Registration District.	6	Ahmednagar	751,228	14,333	18·74	14,337	19·07	18,504	24·36
	7	Poona	900,621	14,149	15·64	15,785	17·53	19,869	22·06
	8	Sholápur	582,487	11,173	16·83	10,892	18·70	14,676	25·20
	9	Sátára	1,062,350	19,711	18·57	21,389	20·11	25,053	23·58
	10	Ratnágiri	997,090	9,847	9·75	8,036	8·06	8,251	8·28
Southern Registration District.	11	Belgaum	864,014	15,620	17·19	12,138	14·05	12,176	14·09
	12	Dhárwár	882,907	17,946	18·97	12,732	14·42	15,338	17·37
	13	Bijápur	638,493	13,814	18·54	8,912	13·96	10,422	16·32
	14	Kánara	421,840	7,767	19·05	6,827	16·18	7,376	17·49
Eastern Registration District.	15	Surat	614,198	12,028	19·72	13,296	21·66	13,675	22·27
	16	Broach	328,330	8,510	24·96	9,388	28·72	10,576	32·35
	17	Kaira	804,800	18,133	22·91	18,260	22·69	22,457	27·66
	18	Panch Mahále	255,479	4,272	17·32	4,314	16·88	4,983	19·50
	19	Ahmedabad	856,824	18,233	21·70	19,681	22·98	22,727	26·54
Sind Registration District.	20	Karáchi	478,688	5,437	12·20	5,931	12·39	6,176	12·90
	21	Hyderabad	754,624	7,777	10·38	9,899	13·13	10,853	14·38
	22	Thar and Párkar	203,344	2,469	13·01	2,814	13·99	2,503	12·33
	23	Shikárpur	852,986	8,895	11·02	14,500	17·00	10,745	12·60
	24	Upper Sind Frontier	124,131	823	7·94	1,753	14·12	1,126	9·07

ABSTRACT.

Western Registration District	4,081,830	61,770	16·27	66,104	16·19	77,414	18·96
Central "	4,293,776	69,213	15·71	70,410	16·40	86,133	20·06
Southern "	2,807,234	55,147	18·34	40,609	14·47	45,313	16·14
Eastern Gujarát "	2,857,731	61,181	21·62	64,939	22·72	74,219	25·97
Sind "	2,413,823	25,401	11·13	34,927	14·47	31,138	12·90
Presidency	16,454,414	272,712	16·71	276,989	16·83	314,237	19·10

By Districts.

In all the districts excepting Sind fever caused a higher mortality during the year than in 1884. In the Eastern Gujarát Registration District the fever death-rate was the high one of 25·97 per 1,000 of population against 22·72 in 1884 and 21·62 during the previous ten years. In the Central Registration District the ratio was 20·06 against 16·40 in 1884 and 15·71 the decennial mean. In the Western Registration District the ratio was 18·96 against 16·19 in the previous year and 16·27 the mean for the last ten years. The ratio in the Southern Registration District was 16·14 against 14·47 and 18·34 respectively in the previous year and the mean. In Sind Registration District the ratio 12·90 was less than the ratio 14·47 in 1884, but

it was slightly higher than the mean 11·13. The Collectorate of Broach heads the list with a millesimal rate of 32·35 per 1,000 of population against 28·72 in 1884 and 24·96 in the previous ten years, and the following Collectorates have also high rates:—Káira 27·66, Ahmedabad 26·54, Násik 25·83, Sholápur 25·20, Ahmednagar 24·36, Sátára 23·58, Surat 22·27, Khándesh 22·08, Poona 22·06, Thána 20·00, and Panch Maháls 19·50. The Presidency rate being 19·10 against 16·83 in the previous year and 16·71 the decennial mean.

By Collectorates.

79. The next table shows the recorded deaths from fever arranged according to urban and rural registration circles, and it will be seen from it that in only 7 Collectorates, *viz.* Sholápur, Kaira, Ahmedabad, Hyderabad, Thar and Párkar, Shikárpur and Upper Sind Frontier, the urban rate is higher than the rural. For this Presidency the death-rate from fever in the urban population amounted to 14·74 per 1,000 of population against 13·83 in the previous year, but among the rural population it amounted to 19·74 against 17·27 in 1884. This fact was brought forward in my last two reports as proving the necessity for improving village sanitation :—

Death-rates in Urban and Rural Population.

Collectorates.	Urban and Rural.	Population.	1884.	1885.
Khándesh	Urban ...	49,465	12·84	17·27
	Rural ...	1,187,766	17·85	22·28
Násik	Urban ...	48,535	15·86	21·28
	Rural ...	732,671	15·74	26·13
Thána	Urban ...	27,366	18·96	14·91
	Rural ...	780,001	13·82	20·19
Bombay	Urban ...	773,196	9·80	8·38
	Rural ...	.....	...	...
Kolába	Urban ...	23,531	6·67	8·03
	Rural ...	459,299	16·22	15·46
Ahmednagar	Urban ...	46,288	11·08	11·75
	Rural ...	704,940	19·60	25·20
Poona	Urban ...	147,376	10·30	13·30
	Rural ...	753,245	18·94	23·77
Sholápur	Urban ...	92,926	22·97	26·60
	Rural ...	489,561	17·88	24·93
Sátára	Urban ...	51,482	14·70	14·72
	Rural ...	1,010,868	20·39	24·03
Ratnágiri	Urban ...	21,563	6·86	6·74
	Rural ...	975,527	8·09	8·31
Belgaum	Urban ...	54,190	8·62	7·97
	Rural ...	809,824	14·41	14·50
Dhárwár	Urban ...	91,071	8·81	10·83
	Rural ...	791,836	15·07	18·12
Bijápur	Urban ...	7,024	3·99	5·55
	Rural ...	631,469	14·07	16·45
Kánara	Urban ...	24,390	9·80	9·76
	Rural ...	397,450	16·57	17·96
Surat	Urban ...	123,073	16·38	16·93
	Rural ...	491,125	22·97	23·60
Broach	Urban ...	48,760	23·40	22·85
	Rural ...	278,170	29·65	34·02
Kaira	Urban ...	67,614	26·34	33·19
	Rural ...	737,186	22·35	27·15
Panch Maháls	Urban ...	25,736	14·73	19·51
	Rural ...	229,743	17·13	19·50
Ahmedabad	Urban ...	171,390	29·87	32·91
	Rural ...	684,934	21·26	24·94
Karáchi	Urban ...	68,332	10·90	10·73
	Rural ...	410,356	12·64	13·26
Hyderabad	Urban ...	45,195	14·85	15·05
	Rural ...	709,429	13·01	13·96
Thar and Párkar	Urban ...	2,828	26·17	18·74
	Rural ...	200,516	13·81	12·24
Shikárpur	Urban ...	83,073	19·86	15·70
	Rural ...	769,913	16·69	12·26
Upper Sind Frontier	Urban ...	11,352	18·15	15·15
	Rural ...	112,829	13·71	8·45
Presidency	Urban ...	2,105,756	13·83	14·74
	Rural ...	14,348,658	17·27	19·74

Death-rates in towns and cantonments compared with the rates of the zilla in which they are situated.

80. The next table shows the death-rate from fever in towns and cantonments as compared with the rates of the zillas in which they are situated:—

Collectorates.	Deaths from Fever by Zillas in 1885.	Town Circles and Cantonment Circles.	Death-rate of Towns and Cantonments in 1885.
Khándesh	22·08	Dhulia	14·58
		Nandurbár	26·31
		Chopda	18·66
		Nasirabad	14·15
Násik	25·83	Násik	19·96
		Yeola	23·13
		Devláli Cantonment	24·86
		Málegaon do.	30·69
Thána	20·00	Thána	17·02
		Kalyán	12·55
Bombay	8·38	Bombay	8·38
Kolába	15·10	Panvel	3·67
		Alíbág	11·76
		Mahád	11·17
Ahmednagar	24·36	Ahmednagar	10·15
		Sangamner	21·94
		Ahmednagar Cantonment... ...	3·70
Poona	22·06	Poona	13·48
		Junnar	13·88
		Poona Cantonment	17·81
		Kirkee do.	8·15
Sholápur	25·20	Sholápur	24·63
		Bársi	31·68
		Pandharpur...	28·74
Sátára	23·58	Sátára	15·33
		Karád	14·47
		Wái	14·30
Ratnágiri	8·28	Vengúrla	4·60
		Ratnágiri	8·24
Belgaum	14·09	Belgaum	9·39
		Gokák	6·21
		Athni	6·79
		Belgaum Cantonment	7·83
Dhárwár	17·37	Dhárwár	13·87
		Hubli	10·58
		Gadag-Bettigeri	7·53
		Ránebennur	9·12
Bijápur	16·32	Kaládgi	5·55
Kánara	17·49	Kárwár	9·66
		Kumta	9·88
Surat	22·27	Surat	18·36
		Bulsár	5·06
Broach	32·35	Broach	23·74
		Jambusar	19·95
Kaira	27·66	Kaira	27·61
		Nadiád	42·65
		Borsad	20·77
		Kapadvanj	30·81
Panch Mahále	19·50	Godhra	11·17
		Dohad	28·48
Ahmedabád	26·54	Ahmedabad	36·60
		Gogha	14·30
		Viramgám	38·87
		Dholka	10·44
		Ahmedabad Cantonment	26·29
Karáchi	12·90	Karáchi	10·61
Hyderabad	14·03	Hyderabad	14·87
Thar and Párkar	12·33	Umarkot	18·74
Shikárpur	12·60	Shikárpur	17·34
		Sukkur	11·65
		Lárkhána	18·80
Upper Sind Frontier	9·07	Jacobabad Town and Cantonment Circle.	15·15

The highest death-rate from fever is reported to have occurred at Nadiád, a town in the Kaira Collectorate, where it attained the enormously high rate of 42·65 per 1,000 of population against a zilla rate of 27·66. In only 14 towns and cantonments situated in 10 different Collectorates, excluding the City of Bombay, the death-rate from fever is higher than the average death-rate of the zilla. In the Nandurbár town of the Khándesh Collectorate, the death-rate from fever is higher than that of the zilla. In the Málegaon Cantonment of the Násik Collectorate the death-rate is higher than that of the zilla. In the Sholápur Collectorate in the towns of Bársi and Pandharpur the town rate is higher than that of the Collectorate. In the towns of Nadiád and Kapadvanj the town rates are higher than that of the zilla. In Panch Maháls in the town of Dohad the fever death-rate is higher than in the zilla. In the Ahmedabad Collectorate in the Ahmedabad and Viramgám towns the rate is higher than in the zilla. There is a very small difference of 0·84 between the town and zilla rate of Hyderabad. The fever death-rate in the town of Umarkot of the Thar and Párkar Collectorate has a higher rate than the zilla. The towns of Shikárpur and Lárkhána in the Shikárpur Collectorate, and Jacobabad in the Upper Sind Frontier, have higher rates than the zilla.

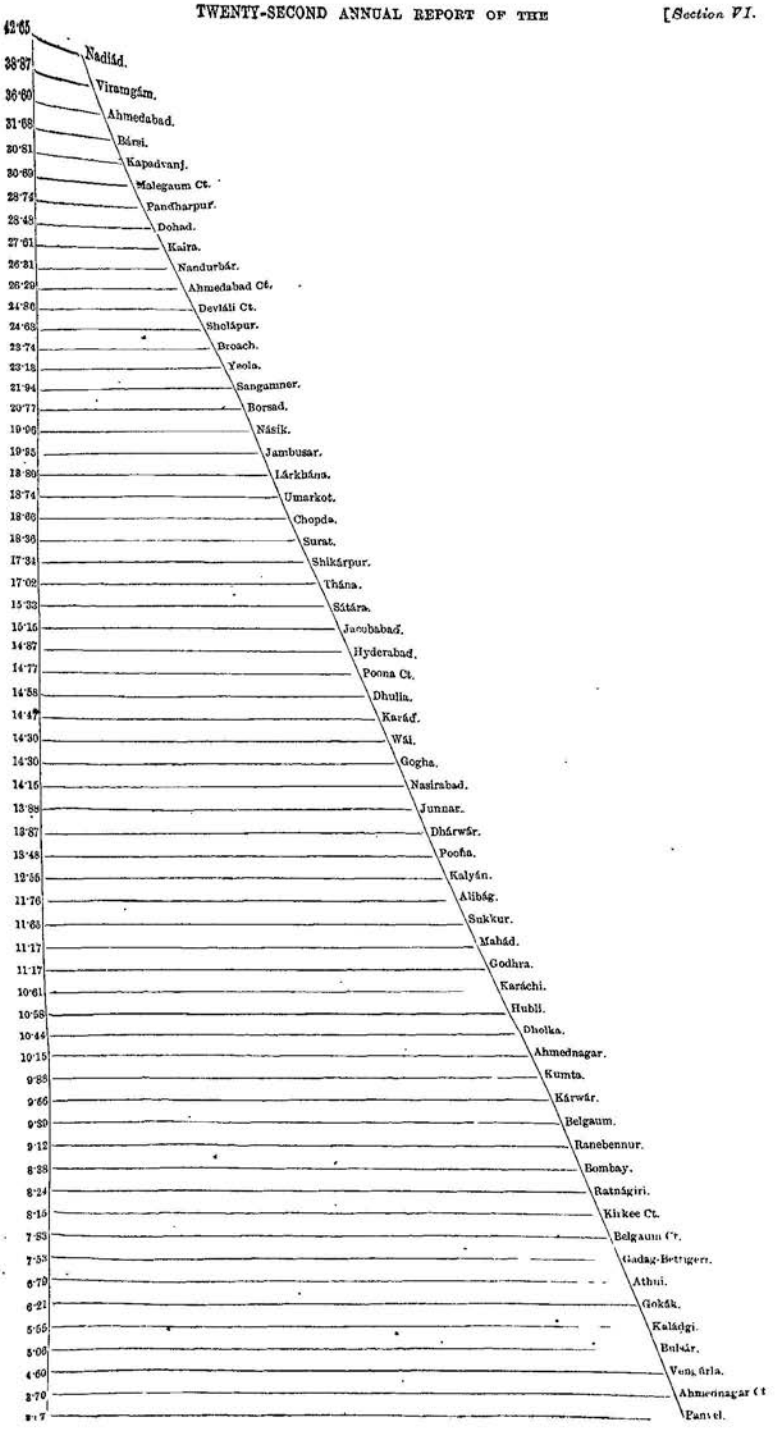
Deaths by months.

Months.	Mean for 10 years 1875 to 1884.	1884.	1885.
January	23,109	22,510	23,497
February	20,051	20,290	21,697
March	21,215	22,096	23,550
April	20,415	20,469	22,062
May	20,230	20,673	23,229
June	18,867	18,498	23,751
July	21,466	18,902	26,767
August	24,289	22,273	30,171
September	24,096	23,462	29,346
October	24,749	27,767	32,027
November	27,971	31,512	29,904
December	26,224	28,537	28,236
	272,712	276,989	314,237

81. The table in the margin shows the monthly distribution of these deaths as compared with the mean and the corresponding months of 1884. In the months from January to October the deaths from fever were both above the mean and the corresponding months in 1884. In November and December they were below the previous year, but were above the mean. The maximum mortality from fever took place in the month of October when 32,027 deaths were reported, and the minimum in the month of February when 21,697 were recorded.

Fever Diagram.

82. The following diagram shows at a glance the death-rate from fever in each town and cantonment in the Presidency arranged in sequence from highest to lowest rate :—


42·65 Nadiád.
38·87 Viramgám.
36·60 Ahmedabad.
31·68 Bársi.
30·81 Kapadvanj.
30·69 Malegaum Ct.
28·74 Pandharpur.
28·48 Dohad.
27·61 Kaira.
26·31 Nandurbár.
26·29 Ahmedabad Ct.
24·86 Devláli Ct.
24·63 Sholápur.
23·74 Broach.
23·18 Yeola.
21·94 Sangamner.
20·77 Borsad.
19·96 Násik.
19·85 Jambusar.
18·80 Lárkhána.
18·74 Umarkot.
18·66 Chopda.
18·36 Surat.
17·34 Shikárpur.
17·02 Thána.
15·33 Sátára.
15·15 Jacobábad.
14·87 Hyderabad.
14·77 Poona Ct.
14·58 Dhulia.
14·47 Karád.
14·30 Wái.
14·30 Gogha.
14·15 Nasirabad.
13·89 Junnar.
13·87 Dhárwár.
13·48 Poona.
12·55 Kalyán.
11·76 Alibág.
11·63 Sukkur.
11·17 Mahád.
11·17 Godhra.
10·61 Karáchi.
10·58 Hubli.
10·44 Dholka.
10·15 Ahmednagar.
9·85 Kumta.
9·60 Kárwár.
9·30 Belgaum.
9·12 Ranebennur.
8·38 Bombay.
8·24 Ratnágiri.
8·15 Kirkee Ct.
7·83 Belgaum Ct.
7·53 Gadag-Betigeri.
6·79 Athni.
6·21 Gokák.
5·55 Kaládgi.
5·06 Bulsár.
4·60 Vengúrla.
3·70 Ahmednagar Ct
2·7 Panvel.

BOWEL-COMPLAINTS.

Deaths from bowel-complaints by sexes.

83. During 1885, bowel-complaints caused the deaths of 24,522 males and of 20,534 females, or a total of 45,056 persons against 35,983 in 1884 and a decennial mean of 34,952.

Deaths since 1874.

84. The number of deaths reported from bowel-complaints in each year since 1874 is as follows :—

Years.	Number of Deaths from Bowel-complaints.	Years.	Number of Deaths from Bowel-complaints.
1874	26,990	1880...	24,452
1875	33,650	1881...	30,342
1876	33,683	1882...	28,353
1877	60,257	1883...	35,292
1878	41,165	1884...	35,983
1879	26,349	1885...	45,056
Total for six years ...	222,094	Total for six years ...	199,478
Mean ...	37,016	Mean ...	33,246

Deaths by Districts and Collectorates.

85. The following table shows these deaths arranged by Districts and Collectorates :—

Districts.	Number.	Collectorates.	Population according to Census of 1881.	Deaths from Bowel-complaints in: Mean for 10 years from 1875 to 1884.	Ratio per 1,000 of Population.	1884.	Ratio per 1,000 of Population on Census of 1881.	1885.	Ratio per 1,000 of Population on Census of 1881.
Western Registration District.	1	Khándesh	1,257,281	3,985	3·58	4,386	3·50	5,710	4·61
	2	Násik	781,206	1,759	2·32	1,928	2·48	3,364	4·31
	3	Thána	807,361	272	0·35	273	0·34	548	0·68
	4	Bombay	773,196	2,194	3·15	1,672	2·16	1,520	1·97
	5	Kolába	482,830	222	0·48	325	0·67	333	0·69
Central Registration District.	6	Ahmednagar	751,228	2,034	2·66	1,903	2·53	2,469	3·28
	7	Poona	900,621	1,578	1·74	1,764	1·94	2,149	2·39
	8	Sholápur	582,487	1,713	2·88	1,197	2·06	1,699	2·92
	9	Sátára	1,062,350	2,725	2·57	2,016	1·90	3,426	3·22
	10	Ratnágiri	997,099	1,427	1·41	1,034	1·04	1,275	1·28
Southern Registration District.	11	Belgaum	864,014	3,353	3·09	4,689	5·43	5,284	6·09
	12	Dhárwár	882,907	4,634	4·90	4,791	5·33	5,659	6·41
	13	Bijápur	638,493	1,569	2·11	1,597	2·50	1,882	2·82
	14	Kánara	421,840	1,134	2·78	762	1·81	840	1·99
Eastern Registration District.	15	Surat	614,198	1,515	2·48	1,811	2·95	1,881	3·06
	16	Broach	326,930	587	1·72	622	1·90	696	2·13
	17	Kaira	894,860	2,085	2·63	2,671	3·31	3,205	3·98
	18	Panch Mahále	505,479	305	1·24	115	0·45	114	0·56
	19	Ahmedabad	866,324	1,379	1·64	1,926	2·25	2,494	2·81
Sind Registration District.	20	Karáchi	478,688	135	0·30	183	0·33	288	0·60
	21	Hyderabad	754,924	83	0·11	70	0·09	97	0·13
	22	Thár and Párkar	203,344	30	0·16	30	0·15	24	0·12
	23	Shikárpur	852,986	293	0·26	297	0·35	207	0·24
	24	Upper Sind Frontier	124,181	30	0·29	48	0·39	52	·42

ABSTRACT.

Western Registration District	4,081,830	8,423	2·22	8,514	2·09	11,475	2·81
Central	4,293,776	9,477	2·15	7,914	1·84	11,018	2·57
Southern	2,807,254	10,695	3·56	11,732	4·20	13,565	4·83
Eastern Gujarát	2,857,731	5,871	2·07	7,145	2·71	8,330	2·91
Sind	2,413,823	486	0·21	628	0·26	668	0·28
Presidency ..	16,454,414	34,952	2·14	35,983	2·19	45,056	2·73

By Districts.

The Southern Registration District heads the list with the very high ratio of 4·83 per 1,000 of population against 4·20 in 1884 and 3·56 the decennial mean. Gujarát comes next with

a ratio of 2·91 and next to it is the Western Registration District 2·81, and following it is the Central Registration District 2·57, and the last of all Sind with a rate of 0·28 per 1,000. In the Presidency the rate was 2·73 against 2·19 in the previous year and a decennial mean of 2·14. All the districts show an increase in the death ratios. In Collectorates the highest ratios were recorded in Dhárwár 6·41 and Belgaum 6·09, and the lowest in Hyderabad 0·13 and Thar and Párkar 0·12.

By Collectorates.

86. The next table shows these deaths arranged by urban and rural registration circles in the Presidency. In 11 Collectorates the urban rate was higher than the rural, but the urban population in the Thar and Párkar Collectorate was free from this disease. The urban Presidency rate was 2·41 against 2·19, and the rural Presidency rate 2·79 against 2·19 in the previous year:—

Death-rates in Urban and Rural Population.

Collectorates.	Urban and Rural.	Population.	1884.	1885.
Khándesh	Urban ...	49,465	1·23	2·37
	Rural ...	1,187,766	3·60	4·71
Násik	Urban ...	48,585	2·84	3·42
	Rural ...	732,671	2·45	4·37
Thána	Urban ...	27,366	0·22	1·13
	Rural ...	780,001	0·34	0·66
Bombay	Urban ...	773,196	2·16	1·97
	Rural ...	.....	...	...
Kolába	Urban ...	23,531	0·09	0·72
	Rural ...	459,299	0·70	0·69
Ahmednagar	Urban ...	46,288	2·70	2·25
	Rural ...	704,940	2·52	3·35
Poona	Urban ...	147,376	17·30	2·29
	Rural ...	753,245	2·00	2·41
Sholápur	Urban ...	92,926	3·79	4·37
	Rural ...	489,561	1·73	2·65
Sátára	Urban ...	51,482	4·88	5·83
	Rural ...	1,010,868	1·75	3·09
Ratnágiri	Urban ...	21,563	0·57	0·37
	Rural ...	975,527	1·05	1·30
Belgaum	Urban ...	54,190	4·54	4·82
	Rural ...	809,824	5·49	6·18
Dhárwár	Urban ...	91,071	3·23	3·95
	Rural ...	791,836	5·57	6·69
Bijápur	Urban ...	7,024	2·85	5·12
	Rural ...	631,469	2·19	2·80
Kánara	Urban ...	24,390	1·27	2·05
	Rural ...	397,450	1·24	1·99
Surat	Urban ...	123,073	0·54	0·66
	Rural ...	491,125	3·55	3·66
Broach	Urban ...	48,760	5·50	6·89
	Rural ...	278,170	[illegible]	1·29
Kaira	Urban ...	67,614	[illegible]	3·28
	Rural ...	737,186	3·10	4·05
Panch Maháls	Urban ...	25,736	0·78	1·55
	Rural ...	229,743	0·41	0·45
Ahmedabad	Urban ...	171,399	2·66	2·80
	Rural ...	684,934	2·15	2·82
Karáchi	Urban ...	68,332	1·08	1·87
	Rural ...	410,[illegible]6	[illegible]	0·39
Hyderabad	Urban ...	45,1[illegible]	0·02	0·07
	Rural ...	709,429	0·10	0·13
Thar and Párkar	Urban ...	2,828	[illegible]	...
	Rural ...	200,516	[illegible]	0·12
Shikárpur	Urban ...	83,073	[illegible]	0·57
	Rural ...	769,9[illegible]	0·29	0·22
Upper Sind Frontier	Urban ...	11,352	2·03	1·59
	Rural ...	112,829	0·22	0·30
Presidency ...	Urban ...	2,105,756	2·19	2·41
	Rural ...	14,348,658	2·19	2·79

Death-rates from bowel-complaints in Towns and Cantonments compared with Collectorates.

87. The following table shows the death-rates in town and cantonment circles:—

Collectorates.	Death rate from Bowel-complaints by Zillas in 1885.	Town Circles and Cantonment Circles.	Death-rate of Towns and Cantonments in 1885.
Khándesh	4·61	Dhulia	3·03
		Nandurbár...	8·62
		Chopda	0·14
		Nasirabad	...
Násik	4·31	Násik	3·19
		Yeola	3·39
		Devláli Cantonment	2·76
		Málegaon do.	6·88
Thána	0·68	Thána	2·08
		Kalyán	0·08
Bombay	1·97	Bombay	1·97
Kolába	0·69	Panvel	0·77
		Alíbág	...
		Mahád	1·32
Ahmednagar	3·28	Ahmednagar	2·34
		Sangamner	2·62
		Ahmednagar Cantonment ...	0·87
Poona	2·39	Poona	2·73
		Junnar	2·41
		Poona Cantonment	1·59
		Kirkee do.	0·28
Sholápur	2·92	Sholápur	2·49
		Bársi	1·36
		Pandharpur	13·90
Sátára	3·22	Sátára	8·13
		Karád	2·51
		Wái	3·17
Ratnágiri	1·28	Vengúrla	0·22
		Ratnágiri	0·48
Belgaum	6·09	Belgaum	1·30
		Gokák	3·20
		Athni	13·77
		Belgaum Cantonment	4·59
Dhárwár	6·41	Dhárwár	1·39
		Hubli	3·35
		Gadag-Bettigeri	9·71
		Ránebennur	3·34
Bijápur	2·82	Kaládgi	5·12
Kánara	1·99	Kárwár	1·02
		Kumta	3·39
Surat	3·06	Surat	0·45
		Bulsár	2·34
Broach	2·13	Broach	0·11
		Jambusar	28·92
Kaira	3·98	Kaira	7·91
		Nadiád	2·72
		Borsad	0·08
		Kapadvanj	3·05
Panch Maháls	0·56	Godhra	2·47
		Dohad	0·56
Ahmedabad	2·81	Ahmedabad	0·82
		Gogha	10·62
		Viramgám	12·11
		Dholka	4·06
		Ahmedabad Cantonment... ...	...
Karáchi	0·60	Karáchi	1·87
Hyderabad	0·13	Hyderabad	0·07
Thar and Párkar	0·12	Umarkot	...
Shikárpur	0·24	Shikárpur	0·02
		Sukkur	1·57
		Lárkhána	0·23
Upper Sind Frontier	0·42	Jacobabad Town and Cantonment Circle.	1·59

In the three Collectorates of Ratnágiri, Surat and Hyderabad the death-rates from bowel-complaints are lower in the towns than in the rural circles and out of the 20 remaining Collectorates in only 22 towns is the urban rate in excess of the zilla rate. The extremely high rate of 28·92 per 1,000 is reported from the town of Jambusar in the Broach Collectorate. Pandharpur and Athni have also very high rates, 13·90 and 13·77 respectively, whilst the following towns have also high rates—Viramgám 12·11, Gogha 10·62, Gadag-Bettigeri 9·71, Nandurbár 8·62, Sátára 8·13, Kaira 7·91, Málegaum Cantonment 6·88, and Kaládgi 5·12.

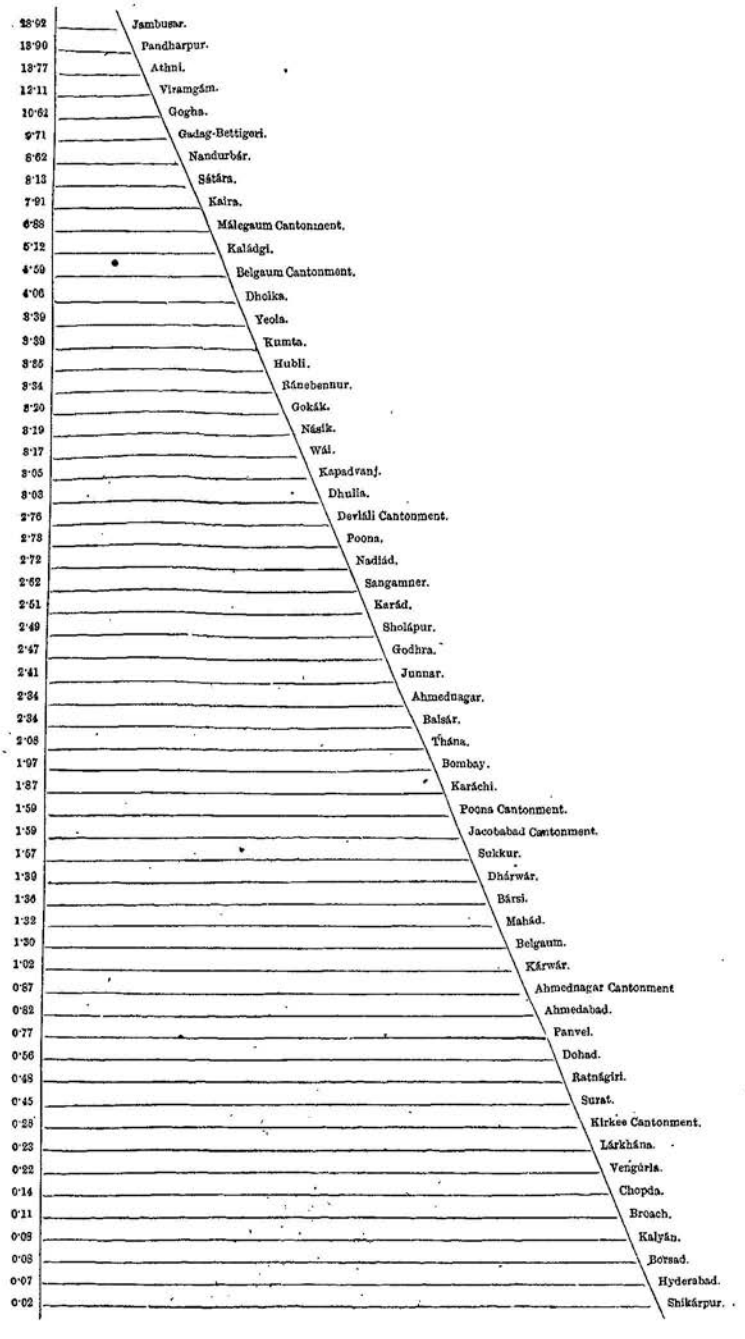
Deaths by Months.

Months.	Mean for 10 years (1875 to 1884).	1884.	1885.
January	2,536	2,728	3,035
February	2,447	2,149	2,788
March	2,040	2,321	2,831
April	2,275	2,409	2,767
May	2,315	2,569	3,132
June	2,568	2,556	3,695
July	2,800	2,933	4,580
August	3,531	3,823	5,377
September	4,357	3,849	4,840
October	3,972	3,732	4,734
November	3,295	3,530	3,945
December	2,816	3,384	3,332
	34,952	35,983	45,056

88. The marginal table shows the monthly distribution of these deaths as compared with the mean and the corresponding months of 1884. During each month of the year excepting December the deaths from bowel-complaints were more than in 1884 and the mean. In December they were less by only 52 than the previous year, but were exceeded than the mean. The maximum mortality was observed in August and the minimum in April.

Bowel-complaints diagram.

89. The following diagram shows at a glance the death-rate from bowel-complaints in each town and cantonment in the Presidency arranged in sequence from highest to lowest rate:—


13·92 Jambusar.
13·90 Pandharpur.
13·77 Athni.
12·11 Viramgám.
10·61 Gogha.
9·71 Gadag-Bettigeri.
8·62 Nandurbár.
8·13 Sátára.
7·91 Kaira.
6·88 Málegaum Cantonment.
5·12 Kaládgi.
4·59 Belgaum Cantonment.
4·06 Dholka.
3·39 Yeola.
3·39 Kumta.
3·35 Hubli.
3·34 Ránebennur.
3·20 Gokák.
3·19 Násik.
3·17 Wái.
3·05 Kapadvanj.
3·03 Dhulia.
2·76 Deviáli Cantonment.
2·73 Poona.
2·72 Nadiád.
2·62 Sangamner.
2·51 Karád.
2·49 Sholápur.
2·47 Godhra.
2·41 Junnar.
2·34 Ahmednagar.
2·34 Balsár.
2·08 Thána.
1·97 Bombay.
1·87 Karáchi.
1·59 Poona Cantonment.
1·59 Jacobabad Cantonment.
1·57 Sukkur.
1·39 Dhárwár.
1·36 Bársi.
1·32 Mahád.
1·30 Belgaum.
1·02 Kárwár.
0·87 Ahmednagar Cantonment
0·82 Ahmedabad.
0·77 Panvel.
0·56 Dohad.
0·48 Ratnágiri.
0·45 Surat.
0·28 Kirkee Cantonment.
0·23 Lárkhána.
0·22 Vengúrla.
0·14 Chopda.
0·11 Broach.
0·09 Kalyán.
0·08 Borsad.
0·07 Hyderabad.
0·02 Shikárpur.

INJURIES.

Deaths from Injuries.

90. During 1885, 3,158 males and 2,419 females, or a total of 5,577 persons met with violent deaths. The mortality from these causes is only 7 more than in 1884, when 5,570 deaths were reported. Of the 5,577 deaths 2,427 were caused by drowning, 1,100 resulted from snake-bites, 502 from wounds, 236 by hanging, 162 by poisoning, 110 from attacks by wild beasts, and 1,040 from causes not specified.

Deaths since 1874.

91. The number of deaths registered from injuries in each year since 1874 was as follows:—

Years.	Number of Deaths from Injuries.	Years.	Number of Deaths from Injuries.
1874	6,165	1880	6,082
1875	6,217	1881	5,950
1876	5,928	1882	5,913
1877	7,539	1883	5,978
1878	7,550	1884	5,570
1879	7,107	1885	5,577
Total for 6 years ...	40,506	Total for 6 years ...	35,070
Mean ...	6,751	Mean ...	5,845

Deaths from injuries in 1884 and 1885 arranged by sexes.

92. The results of the two last years arranged by sex are shown in the following table:—

	1884.			1885.		
	Males.	Females.	Total.	Males.	Females.	Total.
Drowning	1,166	1,295	2,461	1,102	1,325	2,427
Poisoning	77	44	121	92	70	162
Hanging	128	85	213	131	105	236
Wounding	299	116	415	352	150	502
Wild Beasts	82	36	118	86	24	110
Snake-bites	678	399	1,077	698	402	1,100
Other causes	801	364	1,165	697	343	1,040
Total ...	3,231	2,339	5,570	3,158	2,419	5,577

It will be seen from the above table that during 1885, under poisoning, hanging, wounding, and snake-bite there is a total increase of 174 deaths, whilst under drowning, injuries caused by wild beasts, and other causes there is an aggregate decrease of 167 deaths as compared with the results of 1884.

Deaths by Districts and Collectorates.

93. The next table gives the deaths from injuries for each district and Collectorate for 1884 and 1885 and the mean for the previous ten years. The number of deaths during the year in 15 Collectorates is more, and in 9 it is less, than

the previous year. The highest number of deaths was recorded in Hyderabad, and the lowest on the Upper Sind Frontier:—

Districts.	Number.	Collectorates.	Population according to Census of 1881.	Deaths from Injuries in: Mean for 10 years from 1875 to 1884.	Ratio per 1,000 of Population.	1884.	Ratio per 1,000 of Population on Census of 1881.	1885.	Ratio per 1,000 of Population on Census of 1881.
Western Registration District.	1	Khándesh	1,237,251	296	0·27	280	0·23	243	0·19
	2	Násik	781,206	184	0·22	125	0·16	138	0·20
	3	Thána	807,367	390	0·50	363	0·45	377	0·47
	4	Bombay	773,196	328	0·47	302	0·39	305	0·39
	5	Kolába	487,830	165	0·36	156	0·32	163	0·34
Central Registration District.	6	Ahmednagar	751,228	178	0·23	146	0·20	119	0·16
	7	Poona	900,621	311	0·34	353	0·39	387	0·43
	8	Sholápur	582,487	210	0·32	148	0·25	133	0·22
	9	Sátára	1,062,250	392	0·37	349	0·33	274	0·26
	10	Ratnágiri	997,090	411	0·41	353	0·35	317	0·32
Southern Registration District.	11	Belgaum	864,014	259	0·40	293	0·34	260	0·30
	12	Dhárwár	882,901	375	0·40	235	0·27	265	0·30
	13	Bijápur	638,493	316	0·42	195	0·30	159	0·25
	14	Kánara	421,840	224	0·55	192	0·45	240	0·57
Eastern Registration District.	15	Surat	614,198	267	0·44	293	0·47	258	0·42
	16	Broach	323,930	128	0·37	114	0·35	130	0·40
	17	Kaira	804,800	330	0·42	317	0·39	340	0·42
	18	Panch Mahále	255,479	113	0·46	108	0·42	115	0·45
	19	Ahmedabad	856,324	237	0·28	190	0·22	238	0·28
Sind Registration District.	20	Kárachi	478,688	283	0·64	194	0·41	249	0·52
	21	Hyderabad	754,624	469	0·64	359	0·48	400	0·53
	22	Thar and Párkar	203,344	86	0·45	92	0·45	104	0·51
	23	Shikárpur	852,986	318	0·39	387	0·45	315	0·36
	24	Upper Sind Frontier	124,181	34	0·33	26	0·21	28	0.23

ABSTRACT.

Western Registration District	4,081,830	1,343	0·35	1,226	0·30	1,246	0·31
Central "	4,293,776	1,502	0·34	1,349	0·31	1,230	0·29
Southern "	2,307,254	1,274	0·42	915	0·33	924	0·33
Eastern Gujarát "	2,357,731	1,075	0·38	1,022	0·36	1,081	0·39
Sind "	2,413,823	1,190	0·52	1,058	0·44	1,096	0·45
Presidency ..	16,454,414	6,384	0·39	5,570	0·34	5,577	0·34

Death-rates in Urban and Rural-Population.

94. In the following table these deaths are arranged according to urban and rural registration circles in each Collectorate, and it will be seen from it that there is only a difference of 0·05 between the collective ratios of urban and rural population. Contrasted with the previous year there is a slight increase of 0·02 during the year in the urban population. In the rural the ratio is unchanged.

Collectorate.	Urban and Rural.	Population.	1884.	1885.
Khándesh	Urban ...	49,465	0·20	0·12
	Rural ...	1,187,766	0·23	0·20
Násik	Urban ...	48,535	0·29	0·52
	Rural ...	732,671	0·15	0·18
Thána	Urban ...	27,366	0·40	0·58
	Rural ...	780,001	0·45	0·46
Bombay	Urban ...	773,196	0·39	0·39
	Rural ...	.....	...	...
Kolába	Urban ...	23,531	0·25	0·26
	Rural ...	459,259	0·33	0·34
Ahmednagar	Urban ...	46,288	0·30	0·26
	Rural ...	704,940	0·19	0·15
Poona	Urban ...	147,376	0·49	0·52
	Rural ...	753,245	0·37	0·41
Sholápur	Urban ...	92,926	0·30	0·30
	Rural ...	489,561	0·25	0·21
Sátára	Urban ...	51,482	0·27	0·13
	Rural ...	1,010,868	0·33	0·27
Ratnágiri	Urban ...	21,563	0·14	0·14
	Rural ...	975,527	0·36	0·32
Belgaum	Urban ...	54,190	0·61	0·48
	Rural ...	809,824	0·32	0·29
Dhárwár	Urban ...	91,071	0·36	0·43
	Rural ...	791,836	0·25	0·29
Bijápur	Urban ...	7,024	0·42	...
	Rural ...	631,469	0·30	0·25
Kánara	Urban ...	24,390	0·25	0·41
	Rural ...	397,450	0·47	0·58
Surat	Urban ...	123,073	0·38	0·37
	Rural ...	491,125	0·50	0·43
Broach	Urban ...	48,760	0·37	0·57
	Rural ...	278,170	0·34	0·37
Kaira	Urban ...	67,614	0·38	0·58
	Rural ...	737,186	0·39	0·41
Panch Maháls	Urban ...	25,736	0 54	0·58
	Rural ...	229,743	0·41	0·44
Ahmedabad	Urban ...	171,390	0·15	0·17
	Rural ...	684,934	0·24	0·31
Karáchi	Urban ...	68,332	0·31	0·45
	Rural ...	410,356	0·42	0·53
Hyderabad	Urban ...	45,195	0·27	0·64
	Rural ...	709,429	0·49	0·52
Thar and Párkar	Urban ...	2,828	0·35	0·71
	Rural ...	200,516	0·45	0·51
Shikárpur	Urban ...	83,073	0·61	0·39
	Rural ...	769,913	0·44	0·36
Upper Sind Frontier	Urban ...	11,352	0·17	...
	Rural ...	112,829	0 21	0·25
Presidency ...	Urban ...	2,105,756	0·36	0·38
	Rural ...	14,348,658	0·33	0·33

Death-rate in Towns and Cantonments compared with the Collectorates.

95. In the following table the ratios of town and cantonment circles are compared with the ratios of the Collectorate in which they are situated, and it will be seen from it that in 30 town and cantonment circles the rate of mortality from injuries is higher than in the Collectorates in which they are situated. The highest ratio 0·92 took place in Devláli Cantonment in the Násik Collectorate, and the lowest 0·07 in Chopda and Sátára towns. In 4 towns, *viz.* Dhulia, Nasirabad, Alíbág and Kaládgí, and in 3 Cantonments, *viz.* Ahmednagar, Ahmedabad and Jacobabad Town and Cantonment, no deaths were reported from injuries during the year:—

Collectorates.	Deaths from Injuries by Zillas in 1885.	Town Circles and Cantonment Circles.	Death-rate of Towns and Cantonments in 1885.
Khándesh	0·19	Dhulia	...
		Nandurbár...	0·73
		Chopda	0·07
		Nasirabad	...
Násik	0·20	Násik	0·41
		Yeola	0·68
		Devláli Cantonment	0·92
		Málegaon Cantonment	0·53
Thána	0·47	Thána	0·69
		Kalyán	0·47
Bombay	0·39	Bombay	0·39
Kolába	0·34	Panvel	0·29
		Alíbag	...
		Mahád	0·44
Ahmednagar	0·16	Ahmednagar	0·21
		Sangamner	0·57
		Ahmednagar Cantonment ...	...
Poona	0·43	Poona	0·58
		Junnar	0·19
		Poona Cantonment	0·52
		Kirkee do.	0·84
Sholápur	0·23	Sholápur	0·20
		Bársi	0·56
		Pandharpur	0·41
Sátára	0·26	Sátára	0·07
		Karád	0·28
		Wái	0·17
Ratnágiri	0·32	Vengúrla	0·22
		Ratnágiri	0·08
Belgaum	0·30	Belgaum	0·52
		Gokák	0·58
		Athni	0·27
		Belgaum Cantonment	0·52
Dhárwár	0·30	Dhárwár	0·69
		Hubli	0·28
		Gadag-Bettigeri	0·51
		Ránebennur	0·29
Bijápur	0·25	Kaládgi	...
Kánara	0·57	Kárwár	0·29
		Kumta	0·57
Surat	0·42	Surat	0·38
		Bulsár	0·23
Broach	0·40	Broach	0·64
		Jambusar	0·35
Kaira	0·42	Kaira	0·55
		Nadiád	0·46
		Borsad	0·74
		Kapadvanj	0·69
Panch Maháls	0·45	Godhra	0·75
		Dohad	0·40
Ahmedabad...	0·28	Ahmedabad	0·13
		Gogha	0·85
		Viramgám	0·16
		Dholka	0·23
		Ahmedabad Cantonment... ...	...
Karáchi	0·52	Karáchi	0·45
Hyderabad	0·53	Hyderabad	0·64
Thar and Párkar	0·51	Umarkot	0·71
Shikárpur	0·36	Shikárpur	0·21
		Sukkur	0·77
		Lárkhána	0·23
Upper Sind Frontier	0·23	Jacobabad Town and Cantonment Circle	...

Snake-bites by months.

96. The monthly distribution of deaths from snake-bites are given in the next statement for each year from 1880 to 1885 inclusive. The deaths in 1885 were as usual most numerous during the rainy season :—

Months.	Years.						
	1880.	1881.	1882.	1883.	1884.	Mean for 5 years.	1885.
January	26	39	35	34	31	33	23
February	20	34	39	28	27	30	13
March	49	55	47	44	41	47	37
April	50	55	63	53	58	56	48
May	94	95	102	95	79	93	76
June	159	162	149	155	145	154	148
July	177	191	168	179	180	179	176
August	150	165	189	226	179	182	176
September	159	161	211	181	139	170	160
October	177	128	166	133	117	144	122
November	78	80	71	62	55	69	80
December	40	44	37	25	26	34	41
	1,179	1,209	1,277	1,215	1,077	1,191	1,100

Snake-bites by Collectorates.

97. They are similarly shown by localities, and as usual, the highest number (162) is from Hyderabad; Thána follows with 116 and Ratnágiri with 108. In the city of Bombay only 2 deaths were recorded. The total for the Presidency during the year is 23 more than in the previous year :—

Collectorates.	Years.						
	1880.	1881.	1882.	1883.	1884.	Mean for 5 years.	1885.
Khándesh	39	44	25	24	31	32	27
Násik	29	21	13	14	8	17	12
Tháňa	102	114	148	120	84	113	116
Bombay	10	2	5	6	1	5	2
Kolába	29	32	40	26	24	30	39
Ahmednagar	26	17	18	14	16	18	5
Poona	26	21	31	28	38	29	50
Sholápur	11	9	10	7	8	9	11
Sátára	51	44	46	49	59	50	54
Ratnágiri	174	164	149	112	120	144	108
Belgaum	31	43	34	30	42	36	43
Dhárwár	23	36	24	27	28	28	22
Kaládgi	19	32	33	35	22	28	14
Kánara	20	27	22	12	19	20	18
Surat	50	54	49	48	42	49	36
Broach	14	26	35	28	16	24	21
Kaira	79	60	61	77	70	69	49
Panch Mahála	36	28	29	36	34	33	28
Ahmedabad	39	31	64	65	40	48	51
Karáchi	87	99	87	56	63	78	72
Hyderabad	193	186	190	212	151	186	162
Thar and Párkar	42	42	78	78	55	59	66
Shikárpur	46	74	77	107	96	80	89
Upper Sind Frontier	3	3	9	4	10	6	5
Total ...	1,179	1,209	1,277	1,215	1,077	1,191	1,100

Details of injuries.

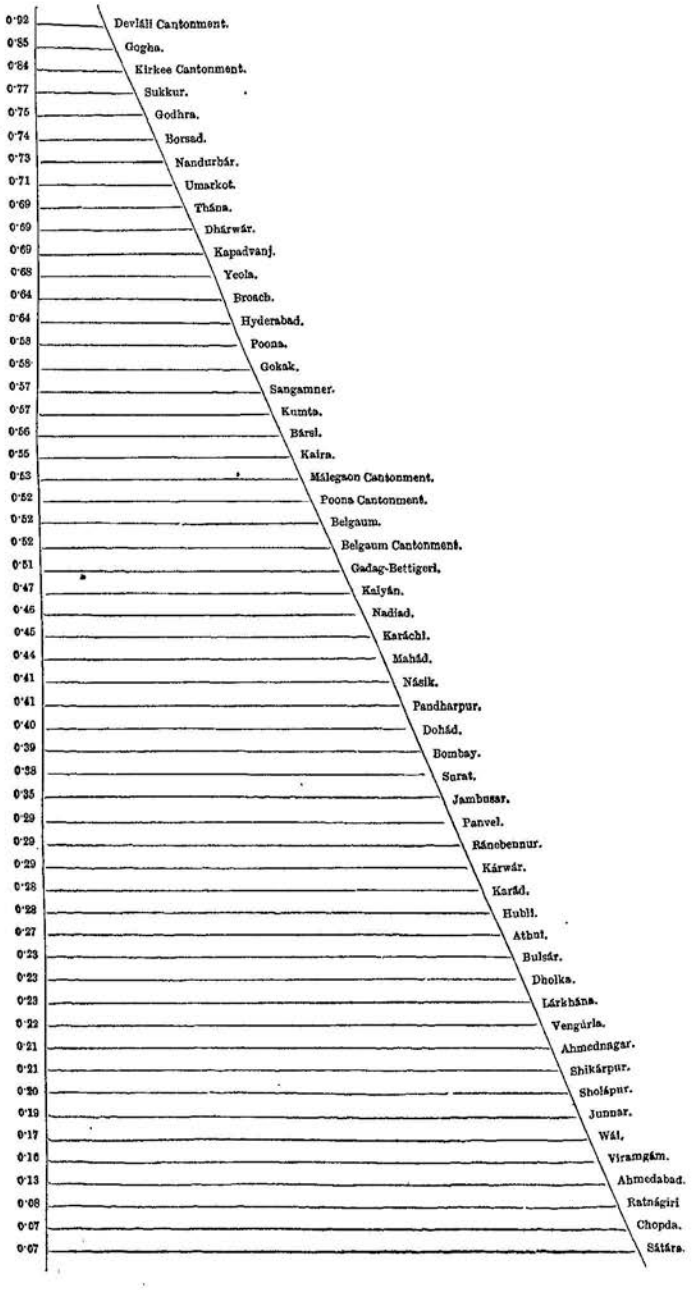
98. In the following table the deaths from injuries are detailed under specified headings, and it will be seen that of the 2,427 deaths by drowning 408 were suicidal, 1,819 accidental, and 200 are entered as otherwise. This heading means, that when the return was submitted these deaths could neither be pronounced suicidal nor accidental. There were 1,222 deaths by drowning in wells against 1,269 in 1884. Of the 748 suicidal deaths 408 were the result of drowning, 92 of taking poison, 219 of hanging and 29 of self-inflicted wounds:—

1		2																											3									4						5									6			7			8			9		
		Drowning.																											Poisoning.									Hanging.						Wounding.									Wild Beasts.			Snake Bites.			Other Causes.			Total.		
		Suicidal.									Accidental.									*Otherwise.									Suicidal.			Accidental.			*Otherwise.			Suicidal.			Accidental.			Suicidal.			Accidental.			*Otherwise.														
		Well.			Tank.			Otherwise.			Well.			Tank.			Otherwise.			Well.			Tank.			Otherwise.																																					
No.	Registration Circles.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.	Male.	Female.	Total.
1	Khándesh	12	22	34	1	..	1	..	1	1	19	45	64	3	2	5	18	11	29	3	2	5	..	..	..	9	1	10	2	1	3	..	..	..	..	1	1	2	2	4	..	..	..	1	..	1	12	1	13	1	5	6	6	..	6	13	14	27	28	5	33	130	113	243
2	Násik	2	2	4	..	..	..	1	..	1	12	24	36	3	1	4	10	9	19	..	2	2	1	1	2	4	..	4	3	1	4	..	..	..	..	..	..	6	2	8	..	..	..	..	2	2	19	7	26	5	4	9	4	..	4	9	3	12	12	9	21	91	67	158
3	Thána	7	10	17	1	1	2	1	2	3	11	34	45	8	5	13	17	11	28	2	6	8	1	5	6	6	9	15	1	..	1	..	1	1	4	..	4	14	10	24	1	2	3	1	1	2	16	4	20	14	4	18	2	1	3	71	45	116	31	17	48	209	168	377
4	Bombay	7	7	14	10	6	16	2	..	2	5	5	10	5	3	8	11	4	15	1	..	1	3	3	6	7	2	9	14	14	28	17	3	20	..	..	..	1	3	4	..	..	..	3	..	3	2	..	2	2	2	4	..	..	..	2	..	2	96	65	161	188	117	305
5	Kolába	2	1	3	..	..	..	..	1	1	14	25	39	3	3	6	17	10	27	..	..	..	1	..	1	2	..	2	..	..	..	..	..	..	..	..	..	3	..	3	..	..	..	..	..	..	10	8	18	1	1	2	1	1	2	22	17	39	12	8	20	88	75	163
6	Ahmednagar ..	5	16	21	..	1	1	..	..	..	21	21	42	1	..	1	3	4	7	2	..	2	..	1	1	6	..	6	..	2	2	1	..	1	..	..	..	..	..	..	1	..	1	..	..	..	..	5	5	..	..	..	..	..	..	3	2	5	13	11	24	56	63	119
7	Poona	2	16	18	..	3	3	..	3	3	37	52	89	7	4	11	27	27	54	4	2	6	1	..	1	6	7	13	14	12	26	7	3	10	1	3	4	6	..	6	1	..	1	1	..	1	21	16	37	1	1	2	3	..	3	25	25	50	34	15	49	199	189	388
8	Sholápur	5	6	11	1	1	2	1	2	3	16	40	56	1	4	5	2	1	3	..	3	3	..	..	..	1	2	3	1	7	8	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..	3	2	5	..	..	..	..	..	..	3	8	11	14	4	18	53	80	133
9	Sátára	2	18	20	..	1	1	1	3	4	30	47	77	3	5	8	24	16	40	1	2	3	..	1	1	5	3	8	..	3	3	1	..	1	..	2	2	7	..	7	..	..	..	..	..	..	3	7	10	2	5	7	2	..	2	33	21	54	17	9	26	131	143	274
10	Ratnágiri	..	3	3	..	1	1	2	4	6	2	13	15	6	8	14	35	25	60	..	3	3	2	..	2	4	1	5	3	1	4	2	1	3	..	..	..	1	..	1	..	..	..	3	..	3	8	4	12	1	..	1	7	1	8	68	40	108	38	30	68	182	135	317
11	Belgaum	7	19	26	..	..	..	2	5	7	21	41	62	3	..	3	16	14	30	2	3	5	..	..	..	4	4	8	..	..	..	1	..	1	2	..	2	9	12	21	1	..	1	2	..	2	14	5	19	4	1	5	1	..	1	27	16	43	19	5	24	135	125	260
12	Dhárwár	10	25	35	5	9	14	4	1	5	26	28	54	14	8	22	6	1	7	2	2	4	3	1	4	..	1	1	..	2	2	..	..	..	2	..	2	20	14	34	1	..	1	1	..	1	23	10	33	5	4	9	3	..	3	11	11	22	9	3	12	145	120	265
13	Kaládgi	3	10	13	..	..	..	1	1	2	11	41	52	2	2	4	6	3	9	..	3	3	..	..	..	..	..	..	..	..	..	..	1	1	..	1	1	16	8	24	..	..	..	1	..	1	8	6	14	5	3	8	..	..	..	8	6	14	10	3	13	71	88	159
14	Kánara	4	4	8	..	4	4	1	..	1	13	33	46	9	8	17	33	20	53	..	1	1	..	..	..	3	1	4	..	..	..	..	..	..	..	..	..	9	6	15	1	..	1	2	..	2	15	..	15	2	1	3	6	..	6	11	7	18	37	9	46	146	94	240
15	Surat	12	14	26	1	2	3	1	2	3	5	33	38	9	6	15	31	18	49	..	1	1	..	..	..	1	2	3	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	..	..	..	7	..	7	1	..	1	4	6	10	22	14	36	48	16	64	142	116	258
16	Broach	2	8	10	1	..	1	..	..	..	3	17	20	8	4	12	5	7	12	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	1	..	1	..	..	..	1	..	1	..	..	..	4	..	4	12	..	12	1	3	4	9	12	21	24	7	31	72	58	130
17	Kaira	10	17	27	..	..	..	..	..	..	9	27	36	13	18	31	7	4	11	3	5	8	..	1	1	..	..	..	4	2	6	..	..	..	1	1	2	9	12	21	..	..	..	1	..	1	11	3	14	11	3	14	8	5	13	22	27	49	72	34	106	186	154	340
18	Panch Mahála ..	1	1	2	..	1	1	..	..	..	3	7	10	4	2	6	3	3	6	..	..	..	..	..	..	..	1	1	..	..	..	1	..	1	..	..	..	2	7	9	..	..	..	..	..	..	1	1	2	1	1	2	1	2	3	15	13	28	29	15	44	61	54	115
19	Ahmedabad ..	3	9	12	..	..	..	..	..	..	11	35	46	14	7	21	4	3	7	..	..	..	..	1	1	1	..	1	2	3	5	1	2	3	..	1	1	..	7	7	..	..	..	1	..	1	12	6	18	13	1	14	3	2	5	21	30	51	30	15	45	116	122	238
20	Karáchi	..	..	..	1	1	2	1	..	1	..	1	1	24	18	42	28	17	45	..	..	..	..	..	..	5	2	7	..	..	..	..	..	..	1	1	2	3	3	6	..	..	..	4	..	4	5	1	6	5	2	7	7	1	8	54	18	72	31	15	46	169	80	249
21	Hyderabad	1	1	2	..	..	..	1	3	4	6	2	8	39	32	71	25	9	34	..	..	..	..	..	..	2	2	4	..	..	..	..	..	..	..	..	..	6	4	10	3	..	3	2	2	4	10	6	16	5	4	9	13	1	14	119	43	162	43	16	59	275	125	400
22	Thar and Párkar ..	1	..	1	..	..	..	1	..	1	5	2	7	5	1	6	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2	..	..	..	1	..	1	2	..	2	8	1	9	60	6	66	3	5	8	89	15	104
23	Shikárpur	1	..	1	..	..	..	..	..	..	4	5	9	12	6	18	36	21	57	2	..	2	..	1	1	6	5	11	..	..	..	..	..	..	2	1	3	2	8	10	1	2	3	1	..	1	19	3	22	7	6	13	6	..	6	67	22	89	39	26	65	205	106	311
24	Upper Sind Frontier	..	..	..	..	..	..	..	..	..	1	2	3	2	2	4	2	2	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	4	2	6	..	..	..	3	2	5	8	1	9	20	12	33
	Total	99	209	308	21	31	62	20	28	48	285	580	865	203	144	347	367	240	607	22	35	57	12	15	27	73	43	116	44	48	92	34	11	45	14	11	25	118	101	219	13	4	17	24	5	29	224	95	319	104	50	154	86	24	110	698	402	1,100	697	343	1,040	3,159	2,419	5,578

* The term "Otherwise" is used, because when the Return is submitted, the Law may not have pronounced those cases to be "Homicidal."

Injuries—diagram.

99. The following diagram shows at a glance the death-rate from injuries in each town and cantonment in the Presidency arranged in sequence from highest to lowest rate :—



OTHER CAUSES.

Deaths from other causes by sexes.

100. The recorded deaths from causes other than those specified numbered 68,788, 35,697 of which occurred among males and 33,091 among females. The total for 1884 was 61,625, so for this year there is an increase of 7,163. In the following table these deaths are shown for each District and Collectorate and the mean for the last ten years, the number and ratios per 1,000 of population and the numbers and ratios for 1884 and 1885 are also given :—

Districts.	Number.	Collectorates.	Population according to Census of 1881.	Deaths from other Causes. Mean for 10 years from 1875 to 1884.	Ratio per 1,000 of Population.	1884.	Ratio per 1,000 of Population on Census of 1881.	1885.	Ratio per 1,000 of Population on Census of 1881.
Western Registration District.	1	Khándesh	1,237,231	920	0·83	792	0·64	1,123	0·91
	2	Násik	781,206	2,076	2·76	1,972	2·52	2,763	3·54
	3	Thána	807,367	1,742	2·24	2,079	2·57	1,971	2·44
	4	Bombay	773,196	11,549	16·60	12,832	16·60	12,615	16·32
	5	Kolába	482,830	1,446	3·16	1,542	3·19	1,521	3·15
Central Registration District.	6	Ahmednagar	751,228	2,825	3·69	2,699	3·59	3,576	4·76
	7	Poona	900,621	2,681	2·96	3,110	3·45	4,727	5·25
	8	Sholápur	582,457	3,229	5·92	1,957	3·36	2,424	4·16
	9	Sátára	1,062,350	2,907	2·74	3,221	3·03	5,021	4·73
	10	Ratnágiri	997,090	5,046	4·99	5,960	5·98	4,625	4·54
Southern Registration District.	11	Belgaum	864,014	8,734	9·61	5,686	6·58	6,063	7·01
	12	Dhárwár	882,907	6,334	6·70	5,301	6·00	5,784	6·55
	13	Bijápur	638,493	5,400	7·25	2,753	4·31	3,272	5·12
	14	Kánara	421,840	3,745	9·18	3,465	8·21	3,959	9·38
Eastern Registration District.	15	Surat	614,198	1,717	2·81	1,321	2·16	1,590	2·59
	16	Broach	326,930	620	1·82	751	2·30	779	2·38
	17	Kaira	804,800	1,081	1·37	1,241	1·54	1,404	1·74
	18	Panch Mahále..	255,479	322	1·30	97	0·38	106	0·41
	19	Ahmedabad	856,324	3,382	4·02	3,179	3·71	3,136	3·66
Sind Registration District.	20	Karáchi	478,638	1,113	2·50	1,398	2·92	1,178	2·46
	21	Hyderabad	754,624	609	0·83	627	0·83	750	0·99
	22	Thar and Párkar	203,344	135	0·71	144	0·71	179	0·88
	23	Shikárpur	852,966	331	0·41	346	0·41	278	0·33
	24	Upper Sind Frontier	124,181	53	0·51	52	0·42	54	0·43

ABSTRACT.

Western Registration District	4,091,830	17,733	4·67	19,217	4·71	19,993	4·90	
Central "	4,293,776	17,388	3·95	16,047	3·74	20,273	4·72	
Southern "	2,807,254	24,213	8·05	17,205	6·13	19,068	6·79	
Eastern Gujarát "	2,857,731	7,122	2·52	6,589	2·31	7,015	2·45	
Sind "	2,413,823	2,241	0·98	2,567	1·06	2,439	1·01	
Presidency ..	16,454,414	68,697	4·21	61,625	3·74	68,788	4·18	

Deaths since 1874.

101. The number of deaths registered from other causes in each year since 1874 is as follows :—

Years.	Number of Deaths from other Causes.	Years.	Number of Deaths from other Causes.
1874	57,840	1880	49,736
1875	65,679	1881	55,522
1876	63,882	1882	56,164
1877	138,426	1883	60,829
1878	75,642	1884	61,625
1879	59,467	1885	68,788

SECTION VII.

GENERAL HISTORY OF VACCINATION.

For full details see Appendix I.

Strength of the Department.

102. The strength of the Department during 1885-86 was:—

5 Deputy Sanitary Commissioners.
3 Superintendents of Vaccination.
31 Inspectors of Sanitation and Vaccination.
5 Assistant Superintendents of Vaccination.
29 Clerks and Kárkúns.
501 Vaccinators.
520 Peons.

Operations.

103. The following table contrasts the work amongst the civil and military population during the year under report with that for 1884-85:—

Establishment.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.
In Civil Life.												
Itinerant	774,311	803,763	56,452 / 7·29	..	59,999	51,839	..	8,160 / 13·60	834,310	882,602	48,292 / 5·79	..
Dispensary	24,014	20,298	..	3,716 / 15·47	1,780	761	..	1,019 / 57·25	25,794	21,059	..	4,735 / 18·36
Total ..	798,325	851,061	56,452 / 7·07	3,716 / 0·47	61,779	52,600	..	9,179 / 14·86	860,104	903,661	48,292 / 56·15	4,735 / 0·55
In Army Life.												
Native Army ..	3,554	3,120	..	434 / 12·21	1,435	681	..	754 / 52·54	4,989	3,801	..	1,188 / 23·81
British Army ..	328	206	..	122 / 37·20	147	122	..	25 / 17·01	475	328	..	147 / 30·95
Total ..	3,882	3,326	..	556 / 14·32	1,582	803	..	779 / 49·24	5,464	4,129	..	1,335 / 24·43
Total for the whole Presidency.	802,207	854,387	56,452 / 7·04	42·72 / 0·53	63,361	53,403	..	9,958 / 15·72	865,568	907,790	48,292 / 5·58	6,070 / 0·70

Eight hundred and fifty-four thousand three hundred and eighty-seven persons were primarily vaccinated and 53,403 were re-vaccinated against 802,207 and 63,361 in 1884-85, showing a net increase of 52,180 or 6·51 per cent. under primary vaccinations and a net decrease of 9,958 or 15·72 per cent. under re-vaccinations. The rate of decrease in primary vaccinations was very high amongst British Troops, being 37·20 per cent., and in re-vaccinations it was very high amongst dispensaries, being 57·25 per cent. The highest decrease (30·95 per cent.) under total operations was amongst British Troops. On the whole there has been an increase of 42,222; or, in other words, for every hundred persons operated on in 1884-85 the numbers for this year have been 104·88.

104. The following table shows the number of persons primarily vaccinated, as also the increase or decrease for the last ten years:—

Primarily vaccinated.	Years ending 31st March.										
	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Persons	690,639	732,184	670,055	561,969	586,501	642,505	729,323	792,206	826,965	802,207	854,387
Increase	..	41,545	..	..	24,532	56,004	86,818	62,883	34,759	..	52,180
Decrease	..	..	62,129	108,086	..	..	..	..	..	24,758	..

105. The following table shows for the last two years the number of infants successfully vaccinated in the Presidency exclusive of Native States. The birth and death statistics are taken for the calendar year in calculating the number available for vaccination, because infants are generally not vaccinated until three months after birth :—

Years.	Children vaccinated successfully.		Children available for Vaccination.	Births returned as having been registered.	Deaths registered among Children under one year.
	Those under one year.	Those between 1 and 6 years.			
1885-86	363,519	151,424	471,822	572,431	100,609
1884-85	328,646	155,393	437,580	534,723	97,143

This year the successful vaccinations fell short of the registered births *minus* deaths amongst those under one year old, and yet the number vaccinated is greater than that for the previous year. Out of 471,822 infants available for vaccination 363,519 or 77·05 per cent. have been protected. Last year the percentage was 75·11.

106. Out of 854,387 persons primarily vaccinated 818,135 cases were successful or 95·76 per cent., being 0·47 per cent. more than in 1884-85. The number of unsuccessful cases was less than that in the preceding year, being 15,891 against 18,948. Two thousand one hundred and ninety-three persons were operated on a second time on account of the failure of the first operation, and in 22,554 cases the result was unknown.

107. During the year 53,403 persons were re-vaccinated against 63,361 for 1884-85. In 46 instances the re-vaccinations were repeated, in 6,405 instances the result could not be ascertained, and in 10,853 the operations failed. The number of successful cases was 36,191 or 67·77 per cent. against 65·11 in the preceding year.

108. The total number of persons operated on was 907,790, and of these 854,326 or 94·11 per cent. were successful. In 1884-85 the percentage was 93·08. 2;239 persons were operated on more than once; the "unsuccessful" numbered 26,744 and the "unknown" cases were 28,959.

The details of the total number of persons operated on for the last two years by districts and circles of vaccination, together with the percentages of increase and decrease, are as follows :—

Districts and Circles.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.
Western Registration District.	96,072	97,250	1,178 / 1·23	..	1,744	1,561	..	183 / 10·49	97,816	98,811	995 / 1·02	..
Presidency Circle.. ..	16,168	16,521	353 / 2·18	..	2,059	788	..	1,271 / 61·73	18,227	17,309	..	918 / 5·04
Central Registration District.	155,201	180,189	24,988 / 16·10	..	5,469	3,220	..	2,249 / 41·12	160,670	183,409	22,739 / 14·15	..
Southern Registration District.	133,853	140,808	6,955 / 5·20	..	5,034	5,222	188 / 3·73	..	138,887	146,030	7,143 / 5·14	..
Eastern Gujarát Registration District.	123,795	132,407	8,612 / 6·96	..	2,310	1,965	..	345 / 14·94	126,105	134,372	8,267 / 6·56	..
Western Gujarát Circle ..	101,244	104,864	3,620 / 3·58	..	25,648	18,922	..	6,726 / 26·22	126,892	123,786	..	3,106 / 2·45
Sind Registration District.	83,736	88,446	4,710 / 5·62	..	19,035	18,644	..	391 / 2·05	102,771	107,090	4,319 / 4·20	..
Baroda	66,811	68,019	1,208 / 1·81	..	283	2,070	1,787 / 631·45	..	67,094	70,089	2,995 / 4·46	..
Cutch	20,486	20,919	433 / 2·11	..	188	196	8 / 4·26	..	20,674	21,115	441 / 2·13	.
Aden, Muscat, Khelat and Bushire.	959	1,638	679 / 70·80	..	9	12	3 / 33·33	..	968	1,650	682 / 70·45	..
British Army	328	206	..	122 / 37·20	147	122	..	25 / 17·01	475	328	..	147 / 30·95
Native do.	3,554	3,120	..	434 / 12·21	1,435	681	..	754 / 52·54	4,989	3,801	..	1,188 / 23·81
Total ..	802,207	854,387	52,736 / 6·57	556 / 0·06	63,361	53,403	1,986 / 3·13	11,944 / 18·85	865,568	907,790	47,581 / 5·50	5,359 / 0·62

109. In primary vaccinations an increase of 52,736 or 6·57 per cent. took place in all the districts and circles. These vaccination units stand in the following sequence : Aden, Muscat, Khelat and Bushire, Central, Eastern Gujarát, Sind, Southern, Western Gujarát, Presidency Circle, Cutch, Baroda and Western Registration District, where the rate is only 1·23 per cent. In the Central Registration District the very large increase of 24,988 operations under primary vaccination is due to the energetic supervision maintained by Surgeon-Major MacRury. There was a decrease of 556, or only 0·06 per cent., amongst the British and Native Troops.

110. In re-vaccinations an increase of only 1,986 or 3·13 per cent. is distributed over Baroda, Aden, Muscat, Khelat and Bhusire, Cutch, and Southern Registration District, where the rate is 3·73 per cent. The decrease in other districts amounts to 11,944 or 18·85 per cent. These circles stand in the following sequence: the Presidency Circle, Native Army, Central, Western Gujarát, British Army, Eastern Gujarát, Western and Sind Registration District; in the last named the rate was 2·05 per cent.

111. As regards operations an increase of 47,581 or 5·50 per cent. is observed in Aden, Muscat, Khelat and Bushire, Central, Eastern Gujarát, Southern, Baroda, Sind, Cutch and Western Registration District, which has the lowest rate of 1·02 per cent., whilst a decrease of 5,359 or 0·62 per cent. is distributed over the British and Native Army, and the Presidency and Western Gujarát Circles, where it is only 2·45 per cent. The net increase is 42,222 or 4·88 per cent.

112. The following table shows by districts and circles the percentages of success in primary vaccinations and re-vaccinations contrasted with those for the previous year:—

No.	Districts and Circles.	Percentages of Success of Primary Vaccinations.		Percentages of Success in Re-vaccinations.	
		1884-85.	1885-86.	1884-85.	1885-86.
1	Cutch Circle	99·17	99·00	90·43	71·43
2	Western Registration District	97·93	97·92	69·67	63·16
3	Eastern Gujarát Registration District ...	96·77	97·28	59·22	62·75
4	Sind Registration District	94·42	96·57	64·70	69·54
5	Presidency Circle	96·54	96·43	87·03	70·69
6	Baroda Circle	95·46	96·22	74·20	83·96
7	Southern Registration District	94·45	95·55	68·18	67·43
8	Central Registration District	96·50	95·06	64·82	65·71
9	Native Army...	87·82	92·98	59·51	73·42
10	Aden, Muskat, Khelat and Bushire... ...	76·95	92·00	44·44	100·
11	Western Gujarát Circle	90·32	91·71	63·30	65·14
12	British Army	92·99	91·26	77·55	79·51
	Average for the whole Presidency ...	95·29	95·76	65·11	67·77

In the "successful" primary vaccinations the percentages are lower than last year in five out of twelve districts and circles. In Eastern Gujarát, Sind, Baroda, Southern, Native Army, Aden, &c., and Western Gujarát Circle they are higher owing to there being fewer "unsuccessful" and "unknown" cases than last year. On the whole there has been an increase in the number and percentage of successful cases over those of last year.

113. The ratio to the total population of protection by successful operation is higher than last year in all the districts and circles. It is lowest in Western Registration District and Presidency Circle. In British and Native Territory it is respectively 31·94 against 30·14 and 29·30 per mille of population in the previous year. On the whole 31·94 persons of all ages per every 1,000 of population against 29·84 last year, 30·89 in 1883-84, 29·74 in 1882-83, 27·54 in 1881-82 and 24·00 in 1880-81, were primarily vaccinated successfully.

Agency.

114. In primary vaccinations the percentages are higher than in the preceding year in Local Fund and Native State establishments and in Dispensaries and the Native Army. The highest percentage is 96·39 under Local Fund and the lowest is 91·26 in the British

Army. The next highest is 95·78 in Municipal and the next lowest is 91·88 under Government. In re-vaccinations the lowest percentage is 50·81 in Cantonments and the highest is 88·60 under Government.

Sex.

115. There were 440,462 males and 413,925 females primarily vaccinated. The re-vaccinated were respectively 31,710 and 21,693 and the totals of persons operated on were 472,172 males and 435,618 females. In primary vaccinations the sex percentages were respectively 51·55 and 48·45 against 51·73 and 48·27 last year; in re-vaccinations they are 59·38 and 40·62 against 61·87 and 38·13; and in total operations they are 52·01 and 47·99 against 52·48 and 47·52.

Race.

116. Of the total number primarily vaccinated 3,974 were Christians, 655,653 Hindus, 128,541 Musalmáns, 2,130 Pársis and 64,089 persons of Other Castes, and in all classes the numbers are higher than last year, whilst the respective percentages are lower except that for persons of Other Castes, being 0·47, 76·74, 15·05, 0·24 and 7·50.

Age.

117. The age details are compiled for three periods, *viz.*, under one year, between one and six, and above six years. The numbers under each period primarily vaccinated were respectively 587,894, 253,927 and 12,566 against 525,905, 257,938, and 18,364 during the preceding year. At the rate of 31 per mille of population, and on the total population of 25,615,528 there were successfully vaccinated 71·16 out of every 100 infants against 63·41 in 1884-85, 61·00 in 1883-84, 59·01 in 1882-83, 58·27 in 1881-82, 49·27 in 1880-81 and 39·78 in 1879-80. Thus each year is characterised by progress in the protection afforded to infants.

Animal vaccination.

118. Animal vaccination was carried on in Bombay, Poona City and Cantonment, Broach Collectorate and Rájkot. The operation of inoculating heifers was generally successful. In Western Gujarát animal vaccination was, in the commencement of the cold weather, carried on in Rájkot by the Assistant Superintendent of Vaccination, who successfully inoculated six heifers and distributed the lymph among the vaccinators. Except in Bombay, where animal lymph only is used, and in Poona, Broach, Anklesvar, Jambusar and Rájkot, where both animal and human lymph were in use, vaccination in all other places was carried on from arm to arm and with human lymph. Vaccination with animal lymph was also carried on in Bandora.

Expenditure.

119. The total expenditure on account of vaccination is shown in the following table:—

Establishment.	Total Expenditure.		Compared with the preceding year.
	1885-86.	1884-85.	+Increase. —Decrease.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Provincial	1,13,913 7 0	1,16,994 2 7	−3,080 11 7
Municipal	27,350 7 0	24,611 7 3	+2,738 15 9
Cantonment	749 0 0	775 11 6	−26 11 6
Local Fund...	83,025 10 0	82,473 12 4	+551 13 8
Native State	55,554 5 6	54,848 13 1	+705 8 5
Total ...	2,80,592 13 6	2,79,703 14 9	+3,996 5 10 −3,107 7 1
			+888 14 9

120. The total cost for the whole Presidency, including all charges, was Rs. 2,80,592-13-6, and the average cost for each successful case was annas 5-5, or 4 pies less than last year.

121. Excluding the pay of the supervising officers the average cost of each successful case was annas 4-4 or 2 pies less than for the previous year.

122. Taking together the work of all the Deputy Sanitary Commissioners, Superintendents of Vaccination, Assistant Superintendents of Vaccination and Inspectors of Sanitation and Vaccination, there were 4,188 encampments, 80,105½ miles travelled in 8,364 days and 315,207 children inspected in 13,507 villages. Out of every 100 persons operated on, 34·72 were this year inspected against 38·44 in the preceding year.

123. In Bombay the Compulsory Vaccination Act has been in force for eight years and in Karáchi for six years, and in both places there has been, since the introduction of the Act, a considerable increase in the number of infants protected.

SECTION VIII.

SANITARY WORKS—MILITARY.

124. The following table compiled from the reports of the Executive Engineers in charge of Military stations shows the total amount spent on sanitary works (Military) at each station in the Presidency during the year 1885 :—

Stations.	Actual Outlay.	Stations.	Actual Outlay.
	Rs.		Rs.
Bombay	56,081	Asirghar	...
Colába		Málegaon	...
Thána	...	Ahmednagar	206
Devláli	304	Sirúr	...
Surat	...	Purandhar	9,245
Baroda	3,972	Poona	...
Ahmedabad	64,477	Kirkee...	320
Rájkot	...	Khandála	...
Bhúj	....	Sátára	100
Deesa	1,122	Kolháp ur	592
Mount Abu	362	Belgaum	378
Nasirabad and Tárághar ...	1,066	Dhárwár	...
Neemuch	817	Karáchi	15,953
Mehidpur	...	Hyderabad (Sind)	1,799
Agar	...	Jacobabad	3,135
Indore	...	Aden	249
Mhow	3,055	Quetta	...

125. The actual outlay on sanitary works (Military) amounted to Rs. 1,63,233 during the year 1885. Of this sum Rs. 56,081 were spent at Bombay and Colába, of which Rs. 2,262 were for constructing latrines and wash-house in Her Majesty's Dockyard; Rs. 5,586 for removing and re-constructing 2 skittle alleys and 1 plunge-bath which were in the line of the new barracks at Colába; Rs. 1,295 for additions and alterations to the Gymnasium at Morley Hall, Colába; Rs. 42,983 for constructing quarters for officers in the Marine Lines: this work is still in progress; Rs. 1,219 for providing arm racks to the pendalls of Native Infantry Regiment at Boree Bandar. At Devláli Rs. 304 were expended for constructing latrines for Staff Officers' servants. Rs. 3,972 were spent at Baroda—Rs. 1,562 for constructing latrines in the Sadar Bázár and Rs. 2,410 for removing barracks, patcheries and subsidiary buildings which had been condemned as unfit for habitation by British troops. At Ahmedabad Rs. 64,477 were expended, of which Rs. 63,773 were for a hospital for British troops; this work was commenced in 1881 and has been completed with the exception of some subsidiary buildings. The hospital has been handed over to the medical authorities for occupation. At Deesa Rs. 1,122 were spent, of which Rs. 79 were expended in improving a well attached to the stables, Rs. 287 for renewing the earthen floor of the stables, and Rs. 428 for asphalting the floors of latrines. Rs. 362 were spent at Mount Abu—Rs. 288 for improving the ventilation of the rooms on the ground-floors of the married men's quarters, and Rs. 74 for supplying a new cover to the well near the cricket ground. At Nasirabad and Tárághar Rs. 1,066 were expended, of which Rs. 413 were for lengthening the water spouts in the upper roofs of the barracks and hospitals at Nasirabad, and Rs. 271 for converting the old Royal Artillery harness-room into a laundry. At Neemuch Rs. 817 were spent on two wells. At Mhow Rs 3,055 were spent, of which Rs. 1,013 were for fitting a tank filter with a pump to well No. 41, Rs. 140 for covering well No. 1, Royal Artillery barracks, the water from which was required for drinking purposes, and Rs. 487 for planting trees. At Ahmednagar Rs. 206 were expended for paving the floors

of the Surgery of the Station Hospital. At Purandhar Rs. 9,245 were expended, of which Rs. 7,725 were for repairs to barrack No. 4. At Kirkee Rs. 320 were spent, of which Rs. 134 were for constructing two latrines for the use of hospital servants in the station hospital compound. At Sátára Rs. 100 were spent for fitting up Quarter Company barrack No. 16 with hooks and drying lines for use as a drying and ironing room by dhobis. At Kolhápur Rs. 592 were expended for constructing open drains in the Cantonment Bázár. At Belgaum Rs. 378 were spent, of which Rs. 112 were for constructing a paved open drain in the Native Infantry Lines, Rs. 110 for constructing an urinary in the European Infantry Lines, and Rs. 123 for making an open drain between "F" and "C" barracks, European Infantry Lines. At Karáchi Rs. 15,953 were expended, of which Rs. 13,270 were for constructing quarters for the Sappers and Miners employed on the Submarine Mining Defences at Manora, and Rs. 1,998 for constructing quarters for the medical subordinates attached to the Native Infantry Hospital. At Hyderabad Rs. 1,799 were expended for converting the medical subordinates' cook-house into an infectious disease ward, and providing a latrine in the compound of the Station Hospital. At Jacobabad Rs. 3,135 were spent, of which Rs. 2,347 were for sinking two wells for the Native Infantry. At Aden Rs. 249 were spent, of which Rs. 177 were for bathing shed at the Pier of Obstruction.

SECTION IX.

SANITARY WORKS—CIVIL.

126. The original reports received from the several municipalities have been abstracted, and the results are here given.

127. The total annual income of the municipalities during the year 1884-85 was Rs. 30,70,624, and the sum expended on conservancy by them was Rs. 6,83,668.

128. The details of income and expenditure on conservancy in each Revenue Division will now be given:—

Divisions.	Annual Income.	Expenditure on Conservancy.	Divisions.	Annual Income.	Expenditure on Conservancy.
	Rs.	Rs.		Rs.	Rs.
Northern Division	8,60,257	2,21,066	Southern Division	3,19,942	1,02,079
Central Division	9,16,931	2,26,706	Sind Division	9,73,494	1,33,817
			Grand Total ...	30,70,624	6,83,668

129. *Water-supply.*—The existing arrangements are almost the same as those of last year. The supply is mainly from rivers, tanks and wells. In Sind Division, canal water is used for drinking purposes in several towns. At Ahmedabad the water is raised daily from the Sábarmati River by steam pumps. The spot from where the water is raised, is at the lowest point of the town and after the river has been fouled by washing clothes, &c. It is under consideration to remove the water-works to a spot above the town. Colonel Ducat, the Consulting Sanitary Engineer, visited the town and submitted a report containing proposals for a new system of water-supply. At Gogha the Sonoria tank is the chief source of water-supply; it is situated N. N. W. and about a mile from the town; the water is brought by a pucka closed channel to a masonry reservoir situated in the centre of the town. At Dákor there is a fine tank, the water of which is excellent; but washing and bathing in it is permitted, and this should be discouraged. At Broach and Surat the water-supply is insufficient. At Thána there is a fair supply of water; it is brought from Pokharan tank. At Bándra the supply is obtained from Vehár Lake. Máhím gets its supply from Ranjani tank, which is about a mile from the town. At Kúrla the water-supply is indifferent in quality: the waters in most of the wells are impure, and they run dry during the hot season.

At Bhiwndi the water is brought by pipes from the Warala Lake. The town of Alibág obtains its supply from Weshwi tank, about two miles from it; the water is brought by iron pipes. At Roha the water works were completed during the year; the water is brought from a tank about 5 miles from the town. At Ahmednagar the Sub-Committee, appointed to report on the best means of improving and increasing the water-supply, have submitted their report, but the scheme has not yet been taken up. At Bhingár the water is brought by an aqueduct from springs in the hills, and is distributed in the town by 9 tanks. Sangamner gets its supply from the river Pravára. Dhulia is mainly dependent on the river Panja for its water-supply. Málegaon for 8 months gets its water-supply from the river Mosam; during the hot season the supply fell short, and the municipality had a dam of sand and earth erected across the river, and temporary wells were dug below the dam: peons were employed to see that the water was not fouled. At Násik the water-supply is derived chiefly from the river Godávari. At Igatpuri the drinking water is obtained from the railway bund; it is brought by pipes to 7 stand-pipes. At Yeola the water-supply is insufficient. Poona City gets its water-supply from 4 aqueducts and the Khadakvásla Canal. The supply is about 1,500,000 gallons per day, or about 15 gallons per head of population.

Poona (suburban municipal town) obtains its supply from the Khadakvásla Canal and Mula and Mutha rivers. Lonávla receives its drinking water from the G. I. P. Railway Company reservoir at Buslia: about 2·4 gallons per head are supplied per day from the reservoir. At Khed the chief source is from the Bhima River: a peon is entertained during the hot season to see that the water is not fouled. At Malcolmpeth the water-supply is obtained from the Yema Lake, the Bishop's and Elphinstone tanks, and from several wells. At the end of every hot season the tanks and wells are cleaned. The Ekruk tank supplies Sholápur with pure drinking water. At Athni the Kumbhar well was deepened and improved at an outlay of Rs. 698, and an old well in the town was also improved at a cost of Rs. 2,351. At Karáchi the water-works were extended and completed during the year. The Secretary of the municipality states that the supply of Malir water, both as regards quality and quantity, has more than realized the sanguine expectations that were indulged in when the scheme was initiated. At Hyderabad, 11 private water services were put up during the year. At Sukkur the chief source of supply is from the river Indus. The water is muddy. Colonel Ducat has proposed that water should be pumped from a well, to be sunk on the northern end of the island of Bukkur, which would yield an unlimited supply of pure water.

130. *Drainage.*—In all the towns there are open masonry side drains to the principal roads and mere earth trenches to others to carry off rain water, but there are no proper drains to carry off foul water from private houses. At Ahmedabad City there are no underground sewers to carry away urine, foul water and nightsoil. A portion of the liquid sewage is collected in troughs and conveyed by municipal servants to the sewage depôts, but the greater portion of this liquid finds its way into pits ("Khalkuva" a description of this was given in the Sanitary Commissioner's Report for 1883, Section V., page 2, under cesspools) made by the people under or at the side of the houses. There are about 6,941 such pits in this city. At Dholka town a large drain was cut. At Kaira there are underground drains in five main streets. At Surat City there are about 8,060 cesspits (khalkuvas). At Ahmednagar both the surface water and the underground drains of the city are very defective. At Sangamner there is a main drain of masonry from Wamborkar's Wada to the Mahalungi River; there are, besides, branch drains connected to the main one. At Dhulia there are closed drains, and they are opened and cleaned once a year. At Násik 2 new drains were constructed and 15 drains were cleaned. In Poona City there are some old sewers which carry sullage water, which is discharged into the river on the north-east of the city. The sullage of the undrained part of the city is either collected in cesspools or carried in open road-side packa built drains. At Sholápur there are 4 under-ground drains, 2 of which have their fall to the north, one to west and the other to the east. The Civil Surgeon of Sukkur says: "The present system of drains at Sukkur, without provision for flushing them as occasion may require, is most dangerous to the public health, and is already a constant cause of complaint by the inhabitants of New Sukkur." Colonel Ducat visited Sukkur at the close of the year, and made proposals for remedying, as far as possible, the present defective system of drains.

131. *Cesspools.*—There are but few municipal cesspools, but most of the private houses have them, and the owners see to their cleanliness. In some of the towns the construction of new ones are discouraged. At Viramgám there are 2 municipal cesspools. At Ránder there are about 787 cesspools which are cleaned periodically by the municipality. At Shirpur there are about 78 cesspools to private houses; these are cleaned by municipal servants. At Násik, after the close of the rainy season, open cesspools were dug along the river bank from Janappá's Gate to Ballaji's temple to receive the drainage of that section of the city. The sewage from the other part of the city is brought by drains to Nav Gate, and the sewage from this point is carried by means of iron pipes across the bed of the river to a length of about 100 feet, and from these by an open channel to a length of about 500 yards below the town. The provision of a new water-supply and sewerage scheme at Násik is a matter of most urgent importance which has frequently been brought to the notice of Government. At Sholápur the municipality remove the filthy water from the cesspools in cylindrical carts to a distance of about half a mile from the town. Since the construction of the open surface drains the number of cesspools is steadily decreasing. At

Shikárpur those under the control of the municipality are kept fairly clean, and are deodorised with quicklime.

132. *Scavengering.*—A staff of sweepers is entertained by each municipality to keep the town and streets clean. In most of the towns dust-bins are placed in suitable places, which are emptied once a day. The street sweepings are either sold, burnt or used for filling up hollows. At Gogha and Anklesvar this work is done by contract. At Thána the street sweepings are taken to the Band Creek and spread on the reclaimed ground. At Karáchi a light tramway for the removal of street sweepings was laid down during the year, and will be in thorough working order in a short time. At Tatta the work is done by contract.

133. *Latrines.*—The majority of municipal towns have public latrines. Private privies at some of the towns are cleaned by municipal sweepers. At Ahmedabád City the night-soil is removed in covered tram cars to a distance of 2½ miles. At Dákor town there are 10 fields set apart as latrines. At Broach City there are no regular built public latrines: open enclosures are allotted to the public to resort to. At Karáchi new latrines were erected. At Athni two sets of latrines were constructed at a cost of Rs. 927. The night-soil from the latrines is carted to depôts about a mile or two from the towns, and is either buried or converted into poudrette.

134. *Urinals.*—Only some of the municipal towns have urinals. The urinals are washed and disinfected daily.

135. *Markets.*—In most of the towns there are no regular built markets; where there are no market buildings the weekly sales are held on open plots of ground. The butchers sell meat in the verandahs of their own houses.

136. *Burial Grounds and Cremation Ghats.*—There are several of both outside each town; cremation ghats are, as a rule, on the banks of rivers. At Dákor there are 2 Mahomedan burial grounds in the heart of the town, but steps are being taken to close them.

137. *New Works.*—At Ahmedabad Rs. 1,897 were spent on new public latrines and urinals, Rs. 1,486 on excavation of Kutcha gutters, and Rs. 2,018 on repairs to latrines and gutters. At Viramgám Rs. 7,308 were spent on 2 new roads. At Modása Rs. 500 were expended in metalling a road. At Nadiád Rs. 8,812 were spent on roads. At Dohad a public latrine was built at a cost of Rs. 623, and Rs. 1,366 were spent on the construction of new roads. At Broach new roads were constructed. At Surat Rs. 18,567 were expended on new works: of this amount Rs. 1,292 were spent on public latrines. At Bassein Rs. 220 were spent on a new road. At Máhím Rs. 175 were expended on a new road. At Roha the water-works were completed during the year. At Mahád Rs. 120 were expended in constructing a wooden fence around the Chandhar tank, and Rs. 124 on a new road. At Ahmednagar Rs. 13,681 were expended on new works. Of this sum Rs. 8,211 were for tracing out the Nepty and Jakhumgaum aqueducts, Rs. 357 on new latrines, Rs. 100 on dust bins, and Rs. 383 on drains. At Dhulia road-side masonry gutters were made. At Songír Rs. 99 were expended on dust bins, and at Párola dust bins were put up at a cost of Rs. 75. At Shirpur and Chopda a road, 400 feet in length, was constructed. At Sinkheda, drains and a road were made. At Betávad new drains, 140 feet in length, were constructed at a cost of Rs. 49. At Nandurbár Rs. 1,325 were expended in building a large underground main drain and other minor drains. At Málegaon Rs. 64 were expended on dust bins and Rs. 1,003 on roads. At Sinnar a new latrine was constructed at a cost of Rs. 280. At Poona City Rs. 73,726 were expended on works; of this Rs. 45,408 were for the central vegetable and fruit market, Rs. 1,733 for public latrines, Rs. 5,425 for 2 cisterns, laying down water pipes, and for cleaning Katraj aqueduct, Rs. 3,090 for constructing U-shaped drains, and Rs. 18,070 for road improvements. At Lonávla a well was sunk near the police chauki. At Sirúr Rs. 8,796 were expended on water works for bringing water from the river to the towns. At Talegaon Dhamdhera 16 new dust bins were constructed. At Ashta public latrines were erected. At Sátára a new latrine was constructed. At Sholápur Rs. 3,922 were expended in constructing new drains, Rs. 3,245 on water-works by laying down branch pipes and erecting stand posts, and Rs. 1,999 on new latrines. At Sirsi new side gutters were constructed at a cost of Rs. 300. At Haliyál Rs. 152 were expended on drains. At Belgaum a large

well is being made, and 20 dust bins were constructed. At Vengúrla a water trough and 3 dust bins were made. At Ratnágiri City iron pipes were substituted for the rubble masonry channel by which the water is brought from the Nachawa spring to the service reservoir at a cost of Rs. 8,379. At Chiplún Rs. 391 were expended in putting laterite pavements round the water trough. At Nargund Rs. 1,305 were expended on water works. At Navalgund Rs. 1,950 were expended on repairs to Nilowa's tank. At Dhárwár Rs. 543 were spent on drains and gutters and Rs. 1,562 on 2 tanks. At Hubli City a mutton market was constructed at a cost of Rs. 1,520. At Matári 2 small wells were built. At Tando Alahyar one well was constructed at a cost of Rs. 800. At Shikárpur 24 streets have been paved. At Sukkur 12 new latrines were erected, and surface drains constructed. At Jacobabad 11 drains and 8 gutters were constructed.

LOCAL FUND CIRCLES.

Northern Division.

138. In the Ahmedabad Collectorate Rs. 27,796 were expended on water-works. Of this sum Rs. 20,908 were spent by Civil Agency and Rs. 6,888 by the Public Works Department. About 23 new wells were sunk and 6 new tanks were constructed. Several wells and tanks were repaired. In the Kaira Collectorate Rs. 23,573 were expended on water-supply, including expenditure on repairs to tanks and wells. Three new wells were sunk at a cost of Rs. 1,878, and Rs. 1,250 were spent in constructing two tanks. In the Panch Maháls Rs. 3,025 were spent on water-supply. Four new wells were sunk and one tank was completed. In the Broach Collectorate 10 new wells were sunk. In the Thána Collectorate Rs. 17,146 were spent in sinking 21 new wells and repairing several wells and tanks. In the Kolába Collectorate 23 new wells were constructed at a cost of Rs. 6,469, and 12 wells and 3 tanks were repaired at a cost of Rs. 3,222, whilst the Local Funds contributed Rs. 6,200 and Rs. 4,527 towards the Alíbág and Roha water-works.

Central Division.

139. In the Ahmednagar Collectorate Rs. 6,369 were spent on water-works, 15 new wells were constructed, and several old wells were repaired. In the Khándesh Collectorate 24 new wells were constructed, and old wells and tanks repaired. In the Násik Collectorate Rs. 7,645 were expended in constructing new wells and repairing old ones. Of this sum Rs. 3,206 were spent on new wells. In the Poona Collectorate Rs. 7,512 were expended on water-works. Of this sum Rs. 2,889 were spent in constructing 5 new wells.

Southern Division.

140. In the Kánara Collectorate Rs. 400 were expended for constructing a well in the Kumta Táluka, a tank was repaired at a cost of Rs. 300 in the Siddápur Táluka, besides these 2 new wells were sunk and old tanks and wells repaired. In the Belgaum Collectorate Rs. 13,881 were expended on sanitary works in the Dhárwár Collectorate. In the tálukás of Karajgi, Kod and Hángal Rs. 2,309 were expended on sanitary works. Of this sum Rs. 1,309 were spent on repairs to wells in the Hubli, Kalghatgi and Bankápur Tálukás, Rs. 15,881 were spent in improving tanks, and Rs. 64 in improving a well. In the tálukás of Dhárwár, Navalgund and Ron Rs. 2,042 were expended in constructing 4 new wells, Rs. 9,000 on 3 new tanks, and Rs. 6,587 in repairing tanks and wells.

Sind Division.

141. In the Karáchi Collectorate Rs. 234 were expended on wells. In the Hyderabad Collectorate Rs. 614 were spent on a tank and well. In the Thar and Párkar Collectorate Rs. 220 were expended in repairing wells and tanks. In the Shikárpur Collectorate Rs. 3,064 were expended in constructing new wells and Rs. 1,229 in repairing wells and tanks.

SECTION X.

PERSONAL PROCEEDINGS AND GENERAL REMARKS.

Personal Proceedings.

142. In the commencement of the year I visited the cities of Surat, Broach and Ahmedabad, and in February proceeded to Karáchi, Jacobabad and Quetta, on which cantonment I submitted an especial report. I passed May at Mahábaleshvar and went to Poona for June, but in July, proceeded in company with the Inspector General of Prisons to Ahmedabad for the purpose of selecting a fresh site for the new jail. In August I visited Násik and Mhow on inspection duty, and in September went home on three months' privilege leave. Surgeon-Major MacRury acted as Sanitary Commissioner, in addition to his own duties, during my absence. On my return journey I rejoined my appointment, by permission of Government, at Aden, and submitted an inspection report on that Settlement. I arrived in Bombay on the 29th December.

Insanitary condition of Surat City.

143. At Surat I was accompanied, during my sanitary inspection, by the Municipal Commissioners, and afterwards had the pleasure of meeting them in the Municipal Hall, where I explained to them the very unsatisfactory state of the town as revealed at the inspections. This ancient city is riddled with khalkowas, and the great need for a fresh-water supply and a sewerage scheme is manifest; but when I advised them to apply to Government for the services of the Consulting Sanitary Engineer I received a reply to the effect they could not afford to pay for his services.

City of Broach.

144. The city of Broach, too, was found to be in a most insanitary condition. This fact was acknowledged with regret by the Municipal Commissioners who accompanied me at my inspection; but, as was pointed out by the President, to whom I wrote on the subject, the Municipality is simply powerless to improve the existing state of things to any very large extent. He quite allowed that Broach is dirty and badly drained, and requires latrines, improved water-supply, and a system of drainage; but the city is, with one exception, the most heavily taxed municipal town in the Northern Division, and its income, being only about Rs. 77,000 a year, is very small, and as it cannot borrow money it is impossible to provide the funds for the necessary cost of the actual works required to put the town into a sanitary state.

Ahmedabad.

145. At Ahmedabad in company with Ráo Bahádur Runchodlál Chotalál I went over the line of the new municipal tramway which has been constructed for the conveyance of the dry sweepings and nightsoil out of the city to a site which appeared to me appropriate and safe.

Quetta.

146. My report on Quetta Cantonment was forwarded by the Government of Bombay to the Government of India, and my proposals regarding it are still under consideration.

New form of Bill of Health ordered by the Government of India.

147. Among the important events of the year I must notice that the Government of India in the Home Department (Sanitary) in Resolution No. 9-227-31, dated 31st July 1885, and republished in Bombay Government Resolution No. 3071, dated 14th August 1885, directed that, for the future, bills of health should be signed by the Health Officer of the Port, and shall be to the following effect:—

BILL OF HEALTH.

This is to certify that the ship is, at the time of leaving this port, in a satisfactory sanitary condition, and that no case of infectious disease dangerous to life exists among its officers, passengers or crew.

It is further certified that the town and port of are at present free from epidemic cholera, plague, yellow fever, and all other dangerous epidemic diseases.

Dated the } (Signed) Health Officer of the Port.

Procedure ordered.

148. The following extracts from the Instructions of the Government of India will show the procedure which is ordered to be observed: "Care should be taken that clean bills of health are not given, unless cholera is distinctly certified by the Medical Board to be 'not epidemic.' When this is not the case, a copy of the last report of the Medical Board should be attached to the bill of health, which should certify only to the state of the ship and its officers, passengers and crew—the last paragraph of the bill of health, as above prescribed, being omitted."

Importance of sanitary condition of vessel recognised.

149. This order of the Government of India provides, as I pointed out in last year's report, a long-felt want, as it recognises the importance of, and necessity for, an inspection into the sanitary condition of the vessel.

Meaning to be attached to "satisfactory sanitary condition."

150. As regards the meaning to be attached to the words "in a satisfactory sanitary condition", I stated that I thought it was essential that the Health Officer should satisfy himself that the bilge is clean, that efficient means for the ventilation of the lower decks and holds have been provided, that the latrine accommodation is sufficient and proper, that the cubic space allowed to each sailor is according to regulation, that the water tanks are clean, and that there is a sufficient supply of good water. In the event of the forecastle or lower decks being found in a dirty condition, that they should be lime-washed or re-painted. Referring to this, Government was pleased to say in its Resolution, General Department, No. 4316, dated 13th November 1885: "The instructions of the Sanitary Commissioner as to whether a ship is in a satisfactory sanitary condition are approved, but in the case of cargo vessels the ventilation of the lower decks and holds appears to be of minor importance, and it is not desirable that a bill of health should be refused because the cubic space allotted to each sailor may not be according to regulation." The Port Trustees have printed a notice, which is handed to the master of every merchant vessel entering the harbour, strongly advising them to pump water in and out of the bilges and to take proper measures to ventilate them; and Government ordered that they should be warned, that, if any accident should occur from their omission to clean the bilges, they will be punished under the Penal Code.

Annual Report of the Health Officer of the Port.

151. The Health Officer of the Port has submitted a long and interesting annual report in which he reviews the sanitary history of the year so far as it is connected with his office, and from which I extract the information necessary to show Government the amount of work performed, &c.

Government orders regarding Health Officer's visits to ships.

152. During the year, Dr. MacCartie brought to notice that he was often put to the greatest inconvenience by masters of vessels not having at the time of the inspection secured the attendance of all persons who were to sail in his vessel: *e.g.*, during the six months ending 30th June, 1885, he granted bills of health to 526 vessels, but he was obliged to pay these vessels no less then 967 visits, owing to the absence of some persons who were to sail in the vessel, and he pointed out that sometimes he had visited a ship as late as 10 P.M. Government was accordingly pleased to resolve that the Health Officer of the Port should not be required to go on board any vessel between the hours of 7 P.M. and 7 A.M., and that, if the master of a vessel cannot arrange for the necessary inspection to take place before 7 P.M., he must wait until next morning.

Government Resolution concerning vaccination of pilgrims arriving from sea.

153. Among other Resolutions of Government affecting or connected with the duties of the Health Officer of the Port I may notice that by Government Resolution, General Department, No. 337, dated 31st January 1886, it was ruled that, in the case of pilgrim ships arriving in the harbour with small-pox on board, no special fee should be charged for vaccinating the unprotected pilgrims,

Issue of Bills of Health on Form C. may be given under certain circumstances to hired transports.

154. By Government Resolution, Military Department, No. 1180, dated 31st March 1885, it was ruled that in the case of hired transports bound for the Red Sea ports and Europe *viâ* the Canal, where it was found impossible to muster the crew, bills of health on Form C. might be given.

Exemption of Native Troops and followers embarking for service from inspection by Health Officer of the Port.

155. By Government Resolution No. 953, General Department, dated 14th August, it was ruled that Native Troops and followers embarking for service should be exempted from inspection by the Health Officer of the Port.

Correct number of pilgrims to be shown in Bill of Health.

156. By Government Resolution, General Department, No. 3096, dated 17th August 1885, it was ordered that the number of pilgrims carried in a vessel should correspond with the number shown in the bill of health.

Different Bills of Health to be issued for certain ports.

157. By Government Resolution, General Department, No. 3335, dated 1st September, it was ruled that the new standard form of bills of health should only be issued to vessels bound to Aden, Red Sea ports, Europe *viâ* the Canal, Persian Gulf, and Mauritius, and that in all other cases in which the issue of bills of health is not obligatory, bills of health, Form C., might be given, but should be signed by the Health Officer of the Port instead of by the Collector of Customs.

Return of Bills of Health granted or refused to be sent to Government and Municipality by the Health Officer of the Port.

158. By Government Resolution No. 3609, General Department, dated 21st September 1885, it was ruled that weekly returns of vessels to which bills of health are granted and refused should be furnished to Government and the Municipality of Bombay by the Health Officer of the Port instead of by the Collector of Customs.

Vessels for Persian Gulf *viâ* Karáchi to obtain Bill of Health at Karáchi.

159. By Government Resolution No. 4316 it was ruled that the standard form of bill of health need not be furnished to vessels proceeding to the Persian Gulf *viâ* Karáchi, as they can obtain at Karáchi the necessary bills of health.

Outgoing vessels.

160. Outgoing vessels are divided into, 1st, steamers and square-rigged vessels; 2nd, native craft; and, 3rd, pilgrim ships; and the following tables show the number of vessels, crews and passengers bound for Aden, Red Sea ports, Europe *viâ* the Canal, Persian Gulf and Mauritius inspected by the Health Officer of the Port during the year:—

Return showing the number of crews and passengers of outward square-rigged vessels and steamers inspected during the year ending 31st December 1885, including Government hired transports, of which the crews only were inspected.

No.	Names of Ports to which sailed.	Number of Ships.	Number of Individuals comprising Crews.	Number of Passengers.	Total of Crews and Passengers.
1	Europe *viâ* the Canal	454	24,024	6,703	30,727
2	Aden and Eastern Coast of Africa ...	16	1,190	409	1,599
3	Red Sea Ports...	40	2,875	160	3,035
4	Suez	7	511	...	511
5	Port Said	17	473	9	482
6	Mauritius	13	444	694	1,138
7	Persian Gulf	71	4,562	6,020	10,582
	Grand Total ..	618	34,079	13,995	48,074

Table showing the number of crews and passengers of outward native craft inspected during the year 1885.

No.	Names of Ports to which sailed.	Number of Vessels.	Number of Individuals comprising Crews.	Number of Passengers.	Total Number of Crews and Passengers.
1	Persian Gulf Ports	105	2,340	550	2,890
2	Other Foreign Ports	127	3,082	702	3,784
	Grand Total ...	232	5,422	1,252	6,674

Return of outward pilgrim ships inspected during the year 1885.

No.	Name of Vessel.	Date of Departure.	Number of Individuals comprising Crews.	Number of Passengers.	Total Crews and Passengers.
1	S. S. "Columbian"	January 5th ...	71	162	233
2	„ "Columbian"	April 29th ...	72	635	707
3	„ "Adria"...	May 31st ...	50	529	579
4	„ "Sirdhana"	June 24th ...	77	438	515
5	„ "Columbian"	„ 26th ...	71	1,089	1,160
6	„ "Taif"	July 21st ...	51	495	546
7	„ "Adria"...	Do. 30th ...	54	532	586
8	„ "Empress of India"... ...	Do. 31st ..	69	1,119	1,188
9	„ "Columbian"	August 17th ...	71	1,057	1,128
10	„ "Roehampton"	Do. 17th ...	33	872	905
11	„ "Nederlanden Orange" ...	Do. 22nd ...	78	858	936
12	„ "Nederlanden Orange" ...	Sept. 11th ...	72	650	722
	Grand Total ...	.....	769	8,436	9,205

Total of the above 3 tables:—

Class.	Number of Vessels.	Number of Crews, Passengers and Pilgrims.
Square-rigged and steamers	618	48,074
Native craft	232	6,674
Pilgrim ships	12	9,205
Total ...	862	63,953

Infectious disease.

161. On only one occasion was a case of supposed infectious disease observed on board a vessel. This case—one of leprosy—was discovered on board a pilgrim ship, and was ordered on shore by the commander.

Refusal of a Bill of Health.

162. In only one case was a bill of health refused to a vessel. This occurred in the case of the S. S. "Clan Murray," which left the port on the 11th January 1885, and the captain gave no opportunity of inspecting the crew and passengers.

Every facility rendered by shipping agents and masters to enable the Health Officer to make a sanitary inspection of vessels, which were found to be in a fair sanitary condition.

163. Dr. MacCartie reports that since the new bill of health was introduced on the 14th August he has received every assistance from the shipping agents and masters, without exception, in carrying out the sanitary inspection of vessels. Ships were generally found to be in a fairly sanitary condition with the exception of pilgrim ships, and these cannot be kept clean with passengers of the pilgrim class.

Ships' bilges.

164. As regards the state of ships' bilges, only one death was reported during the year in the case of a boy who died whilst cleaning a bilge. In this case the jury returned a verdict of death from mephitic poisoining; but from inquiries subsequently made by Dr. MacCartie he does not agree with the verdict, as the death occurred in the engine-room, where the bilge was freely exposed to the air. Dr. MacCartie reports he has found that the bilges of vessels have been fairly attended to by the masters of vessels.

Cause of discrepancy between number of Bills of Health issued and number of vessels inspected.

165. Bills of health are by order of Government granted to H. M.'s troop-ships without an inspection of the crew and passengers by the Health Officer of the Port, on production of a certificate stating that they are free from disease, and that the vessels are in a satisfactory sanitary condition; but from this practice it follows that the return of bills of health *issued* is in excess of the number of vessels *inspected*.

166. The following table gives the number of troop-ships provided during the year with bills of health without an inspection of the crews and passengers by the Health Officer of the Port:—

No.	Name of Vessel.	Date of Departure.	Destination.
1	H. M.'s Troop-ship "Malabar"	January 6th ...	Europe.
2	Do. "Crocodile"	Do. 27th ...	Do.
3	Do. "Jumna"	February 6th ...	Do.
4	I. M. Ship "Canning"...	Do. 23rd ...	Suakim.
5	Do. "Czarewitch"	Do. 23rd ...	Do.
6	Do. "Clive"	Do. 24th ...	Do.
7	Do. "Tenasserim"	March 2nd ...	Do.
8	H. M.'s Troop-ship "Malabar"	Do. 21st ...	Europe.
9	Do. "Serapis"	April 1st ...	Do.
10	H. M.'s Ship "Osprey"	Do. 8th ...	Persian Gulf.
11	H. M.'s Troop-ship "Crocodile"	Do. 10th ...	Europe.
12	H. M.'s Ship "Briton"	Do. 11th ...	Colombo.
13	H. M.'s Troop-ship "Jumna"	Do. 16th ...	Europe.
14	H. M.'s Ship "Euryalus"	Do. 18th ...	Do.
15	I. M. Ship "Canning"	May 22nd ...	Suakim.
16	Do. "Tenasserim"	October 1st ...	Do.
17	Do. "Clive"	Do. 2nd ...	Do.
18	Do. "Canning"...	Do. 5th ...	Do.
19	H. M.'s Troop-ship "Serapis"	Do. 17th ...	Europe.
20	Do. "Crocodile"	Do. 28th ...	Do.
21	Do. "Malabar"	November 7th ...	Do.
22	Do. "Jumna"	Do. 18th...	Do.
23	I. M. Ship "Tenasserim"	December 5th ...	Suakim.
24	H. M.'s Troop-ship "Serapis"	Do. 26th...	Europe.

Health Officer has since 1st September issued Bills of Health, instead of Collector of Customs, to vessels bound for certain ports.

167. Up to the end of August, bills of health on Form C were given to vessels bound to ports on the Coast, Rangoon, Singapore, Hongkong, &c., by the Collector of Customs, but since the 1st of September the Health Officer has issued bills of health on Form C to 68 vessels bound for the above ports.

INCOMING VESSELS.

Number of vessels with infectious disease on board.

168. The following table shows the number of vessels which entered the port with infectious disease on board, and includes H. M.'s troop-ships, which it is usual to inspect on arrival :—

No.	Name of Vessel.	Date of Arrival in Bombay.	From what Port.	Number of Individuals comprising Crews.	Number of Passengers.	Number of Cases of Infectious Disease.	Nature of Disease.
1	H. M.'s Troop-ship "Crocodile"	January 13th ..	Europe ..	263	1,339	None.	None.
2	Do. "Jumna"	Do. 25th ..	Do. ..	261	1,335	None.	None.
3	S. S. "Medura"	February 12th ..	Mangalore ..	78	1	1	Chicken-pox.
4	H. M.'s Troop-ship "Malabar"	March 11th ..	Europe ..	263	1,200	None.	None.
5	Do. "Serapis"	Do. 20th ..	Do. ..	262	1,278	None.	None.
6	S. S. "Selembria"	Do. 29th ..	Port Said ..	39	None.	1	Convalescent small-pox.
7	H. M.'s Troop-ship "Crocodile"	Do. 31st ..	Europe ..	259	1,247	None.	None.
8	S. S. "Surat"	April 3rd ..	Colombo ..	138	25	1	Modified small-pox, convalescent.
9	H. M.'s Troop-ship "Jumna"	Do. 8th ..	Europe ..	261	638	None.	None.
10	S. S. "Arrow"	June 3rd ..	Bhávnagar ..	Unknown.	...	1	Small-pox.
11	H M.'s Troop-ship "Serapis"	October 7th ..	Europe ..	270	1,061	None.	None.
12	Do. "Crocodile"	Do. 18th ..	Do. ..	262	1,122	None.	None.
13	Do. "Malabar"	Do. 30th ..	Do. ..	261	1,263	None.	None.
14	S. S. "Swordsman"	November 1st ..	Zanzibar ..	62	18	1	Small-pox.
15	H. M.'s Troop-ship "Jumna"	Do. 9th ..	Europe ..	261	1,413	9	Measles.
16	Do. "Serapis"	December 19th .	Do. ..	261	1,447	None.	None.
17	Do. "Crocodile"	Do. 29th .	Do. ..	264	1,242	None.	None.
	Total ..	....	....	3,454	14,629	14	

Dr. MacCartie's remarks on pilgrim traffic.

169. Dr. MacCartie makes some interesting remarks on the pilgrim traffic, but they are too long to print, and he also refers to the articles published in the *Times of India* number of 31st October 1885 and in a Turkish newspaper, *La Turquie*, the allegations in which having been fully reported to Government are, therefore, not further noticed here.

170. He points out that the medical registers of the return voyage are furnished to the Custom House officials, but those of the outward voyage are not, and suggests that, if Government approve, the doctors attached to pilgrim ships should report on the outward as well as the homeward voyage. These reports should be submitted to the Health Officer of the Port on arrival in Bombay, as they would be useful as affording him an insight into the attainments of the medical men. The reports should be forwarded through the Sanitary Commissioner to the Surgeon-General with the Government of Bombay. All reports and cases should be kept in English, and not in the vernacular, as is the case at present in some instances.

Necessity for preserving space allowed by law to each pilgrim free from baggage.

171. Dr. MacCartie points out that the space allowed by law to each pilgrim, *viz.*, 9 superficial and 54 cubic feet, would be ample during fine-weather voyages if it were not so often encroached upon by the pilgrim's baggage. There seems to be need for some regulation in this respect; for, as a matter of fact, the allotted superficial area and cubic space are very seriously diminished by the pilgrims insisting upon having all their baggage with them on deck, some of which consists of articles to be sold to pilgrims on the voyage. It would apppear to be desirable that the law should provide that for each pilgrim there should be 9 square feet of clear space on deck free from cargo, goods, cattle, baggage, &c., as laid down in the English Acts.

Necessity for increasing space during monsoon.

172. Dr. MacCartie also points out that for passages during the monsoon it is necessary to increase the space allowed to each pilgrim; and he considers it advisable to increase this, during long foul-weather voyages, to 12 superficial and 72 cubic feet per passenger. I quite agree with his recommendation, especially as he points out that the time of making the Haj is a moveable feast, and in a period of twelve years there would be only four years in which pilgrim ships would depart from India during the S. W. Monsoon, so that this regulation would not entail any very serious hardship on the ship-owners.

173. The following table shows the number of pilgrims arrived from Jeddah during the year 1885:—

No.	Name of Ship.	Date of arrival in Bombay.	Number of Pilgrims.	Number of Admissions into Hospital.	Number of Deaths.	REMARKS.
1	S. S. "Thisbe"	January 10th ...	188½	Nil ...	Nil.	
2	" "Bonnington"... ...	February 3rd ...	58½	Nil ...	Nil.	
3	" "Columbian"	Do. 23rd ...	662	34	4	
4	" "Glen Movis"	April 25th ...	5½	Nil ...	Nil.	
5	" "Columbian"	June 16th ...	5	Nil ...	Nil.	
6	" "Adria"	July 12th ...	28	Nil ...	Nil.	
7	" "Columbian"	August 11th ...	16	Nil ...	Nil.	
8	" "Adria"	September 17th ...	28	Nil ...	Nil.	
9	" "Columbian"	October 16th ...	800½	14	9	
10	" "Empress of India" ...	Do. 21st ...	391	11	8	
11	" "Carlton Tower" ...	November 5th ...	338½	No records	6	
12	" "Abyssinia"	December 1st ...	467	4	3	
13	" * "Elphinstone"... ...	Do. 10th ...	269	No records	6	*Captain prosecuted for having no medical officer on the voyage from Red Sea.
14	" "Columbian"	Do. 11th ...	998	10	10	
15	" "Vorwaerts"	Do. 15th ...	789½	30	11	
	Total ...	.....	5,045	103	57	

Sanitary condition of foreshore of Port of Bombay.

174. The sanitary condition of the various bandars along the foreshore of the harbour attracted attention during the year, and formed the subject of a report by Dr. MacCartie and myself to Government regarding the condition of the foreshore along the harbour. The practical measures recommended for improving the same were as follows:—

1. That no foul matter of any kind be, if possible, allowed to find its way into the harbour.

2. That measures be taken by the Municipality to divert all drains from being discharged into basins, and when this cannot be done, owing to the non-completion of the main sewerage, to carry them to a point below low-water mark.

3. Cessation of the discharge of nightsoil into the harbour from existing latrines.

4. The provision of sufficient latrine accommodation, by owners of property adjoining the foreshore, for their employés.

5. The erection of public latrines at certain bandars.

6. The enclosure of the Port Trust property.

7. The dredging of each basin by the Port Trust.

175. By Government Resolution, General Department, No. 3012, dated 11th August 1885, Government in forwarding a copy of my letter and its accompaniment to the Municipal Commissioner and to the Trustees of the Port of Bombay was pleased to say: "The Trustees have already proceeded energetically with measures for the improvement of the sanitary condition of the foreshore, and they will, no doubt, be glad to adopt the further suggestions of Mr. Hewlett, which appear reasonable and indeed necessary to secure a proper sanitary condition of the foreshore and the Port. The discharge of nightsoil into the harbour should be, as far as possible, prevented, and additional latrines be provided."

Sanitary improvements still under consideration.

176. Dr. MacCartie says: "I had hoped to be able to state the Port Trustees had adopted all these suggestions; but I am informed that the matter still remains *sub judice*." It is satisfactory to add that the "great nuisance in the harbour

has ceased by the discharge of nightsoil into the harbour at Carnac Bandar, and that the Carnac basin has during the S. W. Monsoon been partially dredged."

Cholera outbreak at Sailors' Home.

177. Twelve cases of cholera took place in July at the Sailors' Home, 7 of which proved fatal. This outbreak was attributed by Dr. Barbour to the use of impure aërated drinks and to unwholesome fruit. He also says: "The native shops at Prince's Dock Gate are large factors in occasioning much of the diarrhœa and cholera which prevails among the seamen in the Dock."

178. The following table shows the number of cases of cholera reported during the year among the harbour population, which by the last Census numbered 24,887 persons:—

Months.	Number of Cases.	Number of Deaths.
1. January	2	2
2. February	...	...
3. March	9	9
4. April	13	12
5. May	2	2
6. June	5	4
7. July	3	2
8. August	1	...
9. September ...	4	2
10. October	...	...
11. November... ...	...	...
12. December... ...	...	...
Total ...	39	33

Cholera not imported.

179. All these cases occurred in vessels lying in the harbour, and in no case was the disease imported into it by vessels.

Number of cases.

180. Nine cases, 8 of which were Europeans, occurred on board large vessels and 30 in the ordinary cargo boats plying about the harbour.

Outbreak on board H. M. S. "Briton."

181. Four cases occurred among the crew of H. M. S. "Briton": they all proved fatal after removal to the European General Hospital. The disease was evidently contracted in the city of Bombay. No fresh cases occurred after the ship proceeded to sea a few days after the occurrence of the last case—a fact, as Dr. MacCartie points out, worthy of notice: for, if cholera is contagious, the disease ought to have spread in a comparatively crowded vessel soiled by the discharges of the original cases.

Difficulty regarding disinfection of vessels.

Benefit from a disinfecting chamber.

182. Dr. MacCartie brings to notice the great difficulty experienced in the disinfection of cargo boats in which there have been cases of cholera; and though he, of course, does not believe that there is any specific contagion in cholera, or that the disease is capable of being conveyed to other countries, he points out that "unfortunately those nations that believe in the efficacy of quarantine do believe it, and as a result there is almost perpetual quarantine against Bombay." He, therefore, again brings forward the necessity for a disinfecting chamber in which cargo can be exposed to the action of great heat, in order that nothing may be left undone to impress on Foreign nations the fact that all practicable measures are adopted in this port to prevent the so-called exportation of cholera.

183. A case of cholera occurred on board of a vessel in the Prince's Dock on the last day of loading for an European port. The vessel was disinfected as thoroughly as possible by the Health Department, and left port with a clean bill of health, on which was noted the occurrence of cholera and means of disinfection adopted.

A case of cholera in the Prince's Dock.

184. It will have been observed that, out of the 39 cases of cholera among the harbour population, 33, or 84·5 per cent., of the attacked died. This, as Dr. MacCartie truly says, is a very high death-rate, which will attract notice.

Enormously high proportion of deaths to attacks.

185. It will be within the recollection of Government that in my last annual report I stated that, in my opinion, one of the principal reasons why cholera in Bombay is so unusually fatal, is the fact that sufferers from this disease have to be carried very long distances before they can reach a hospital. Government was pleased to dissent from this opinion, and said: "It must not be overlooked that in the rest of the Presidency most cholera patients are not treated in hospitals and dispensaries at all, and that this theory did not meet with the support of the other Medical Officers, whose opinions on the subject were called for. The high apparent proportion of deaths to attacks in Bombay is probably in a great measure due to the circumstance that many attacks, which do not end fatally, are not reported at all."

Cause of the high death-rate from cholera in Bombay.

186. With all deference, I venture most respectfully to say that my opinion is the result of many years' observation and consideration of the question as Health Officer of Bombay, and, if I may be allowed to do so, I would point out that the argument Government is pleased to use, *viz.*, that "in the rest of the Presidency most cholera patients are not treated in hospitals or dispensaries at all," affords, as shown by the lesser proportion in the Mofussil of deaths to attacks, very strong testimony to the correctness of my opinion, for it shows that persons attacked by cholera in the rest of the Presidency although deprived of all medical advice and attendance yet, in point of fact, have a better chance of recovery than cholera-stricken persons in Bombay, who have, when they reach the hospital, the best medical advice obtainable on this side of India.

187. In my humble opinion, it is a fair assumption to suppose that the reason is that, in the Mofussil, the patients are left alone in their own houses, and do not have their vital powers reduced by being taken long distances. On speaking some years ago to one of the most eminent sanitarians in England on the subject he said, in words I have never forgotten: "Every yard a man with cholera is carried, adds immensely to his danger." Of course it is necessary to move him out of the influence of the cholera-producing cause; but whatever the poison or influence, or whatever else it may be, which produces the effects which we call cholera, there can be no doubt whatever that it is one which principally affects the great nervous centres, especially that of the mesenteric system; and that a man whose nervous system is thus affected can be carried long distances, it may be for miles, without doing him immense harm is opposed to all sanitary experience.

188. I would also point out that the Medical Officers whose opinion on the subject differs from mine, be they who they may, cannot have enjoyed equal opportunities of studying the disease in its initiatory stage as one who for many years was Health Officer of Bombay. Medical Officers, as a rule, rarely see cases of cholera among the poor until they are admitted into hospital. The Health Officer of Bombay studies the disease at the scene of the outbreak, and knows the great danger resulting from delay in getting the patient at rest in bed away from the cholera atmosphere and under treatment, which, if it is to do any good, must be commenced before collapse has set in.

189. As regards the harbour population, let any one consider for himself the course of events which take place when a man is seized with cholera on board a boat out in the harbour, and he will see how seriously the sufferer's chance of recovery must be imperilled by the long delay which ensues before he can be got to bed in the Jamsetjee Jeejeebhoy Hospital. First, there is the panic which is caused, and the discussion as to the best course to pursue;

then there is the bringing him on shore, where a vehicle has to be obtained, and then there is the drive through the town to the Jamsetjee Jeejeebhoy Hospital. All these operations consume time, which is simply invaluable to a cholera-stricken man, and the patient's vital powers are very rapidly exhausted by the exertion he is almost necessarily obliged to make: so that when he does arrive at the hospital he is generally too far gone for medical skill to be of any avail in saving his life.

190. With reference to the last paragraph noted above, *viz.*, that "the high apparent proportion of deaths to attacks in Bombay is probably in a great measure due to the circumstance of many attacks which do not terminate fatally are not reported at all," I would not, of course, contend that every attack is reported, but I know that a very considerable number of them are. The Officers of the Public Health Department and the Police in Bombay have had a very long and careful training in this matter, and are thoroughly to be relied upon; and so many are the ways through which the Police receive information that whilst Coroner I have held inquests on the bodies of persons who were supposed to have met their deaths by unnatural means, but which on investigation turned out to be cases of cholera. As regards the harbour population at all events, I believe the number of attacks from cholera which do not come to the knowledge of the Police are very very few; and surely it must be admitted that the employés of the Public Health Department and the Police in Bombay are a more trustworthy agency than the village patels who send in the cholera returns.

Necessity for a floating hospital.

191. I have ventured to defend my opinion at this length because it involves a very important question, and this is, the desirability of providing a floating hospital for the treatment of all cases of sudden sickness, injuries, &c., occurring among the harbour population. There ought, of course, to be *no* cholera, and the great endeavour on the part of every body should be to remove all cholera-producing causes; but, taking things as they are, I feel confident, if such a hospital as I have spoken of were provided, it would save life to a large extent and be an inestimable boon to the harbour population. Government has ruled in its Resolution, General Department, No. 3337, dated 12th September 1884, that it cannot incur this expenditure; but, perhaps, if Government is pleased to approve of the suggestion, and were to bring the matter to the notice of the Port Trustees, they in conjunction with the Municipality might find the necessary funds.

192. If it is found to be impossible to provide a floating hospital, the next best plan would be to provide a cholera hospital on one of the bandars. Last year I devoted a considerable portion of my report in placing before Government evidence to prove the non-contagious nature of cholera. Government was pleased to say: "The evidence of the non-contagiousness of cholera adduced by Mr. Hewlett is undoubtedly very strong. His Excellency in Council must, however, refrain from expressing any opinion how far Mr. Hewlett has succeeded in indicating the true origin of cholera and in proving that the disease is not contagious, as these questions are still subjects of controversy among experts; but it is admitted on all sides that the disease is fostered by filth and prevented and checked by cleanliness, and if this fact is persistently impressed on the people, sanitary improvement will be facilitated."

193.. Government will be glad to hear that the belief that cholera is not a contagious disease has during the year been amply corroborated by the leading medical authorities in England. In the transactions of a Committee, convened by the Secretary of State for India in Council and presided over by Sir William Jenner, to inquire into the report on cholera by Doctors Klein and Gibbes, at page 12 it is stated Sir William Gull considered "that it had long ago been demonstrated that cholera, as cholera, does not produce cholera. It was in this respect not comparable with such diseases as small-pox, scarlatina, and measles. The presence of cholera depended on conditions of locality, there was no danger in admitting cholera cases into a hospital if the locality or rather its conditions were not admitted at the same time. It was well known that when this fundamental principle was acted on, and when the general surroundings of persons whose duty it was to attend on the cholera sick were duly attended to, the nurses did not succumb to the disease in a larger proportion than other persons." * * * * * *

"It appears to be abundantly proved that cholera is not an infectious or contagious disease. The soil and other local conditions of the place in which it prevails are responsible for it, and not the sick who suffer and die of it. It is by sanitary measures, not by isolation of the sick, that its occurrence and spread can be prevented."

194. I hope Government on reading the above expression of the views of such an eminent authority as Sir William Gull will be convinced that the doctrine I contended for last year, of "Places, not persons," is true, and that the belief that cholera is a contagious disease is as baseless as a belief in witchcraft.

The remarks of Sir William Gull show most conclusively that cholera patients may with perfect safety (as they have been in Calcutta for the last fourteen years) be admitted into a General Hospital; and that the assertion of Surgeon-General Beatty, "that a hospital for natives to be built in a corner of the compound of the European General Hospital was a project fraught with danger and risk to life, and likely to be attended with calamitous results," is one that has been proved to be groundless and opposed to fact.

I hope I have said enough to show that hospitals or, as I would rather call them, rest-houses for the reception of cholera patients may be erected in all parts of Bombay and elsewhere without the slightest danger to the people living in the neighbourhood.

Cholera outbreak at Naples.

195. As it is extremely desirable to place on record every well-authenticated fact regarding cholera, I am much indebted to a member of the Government for kindly permitting me to state, that, having heard from a Swedish Doctor whom he met in Bombay, that there had been a great mortality among the doctors and attendants on the sick during the severe epidemic of cholera in 1884 at Naples, he wrote to a friend and asked him to make enquiries into the truth of the statement. This gentleman was absent from Naples, but applied to an Italian nobleman "who had been very active and zealous in personally attending on the cholera patients" to ascertain the fact. In answer he received a reply stating that "none of the doctors, none of the amateur assistants, and only two of the Sisters of Charity out of the great number who were in constant attendance on the cholera patients had died of cholera."

The experience at Naples thus affords additional and very strong evidence of the non-contagiousness of cholera, and the above account forcibly illustrates the necessity of having all statements concerning the circumstances of an outbreak of cholera verified before they are accepted as facts.

Cholera in Italy.

196. The recent outbreaks of cholera at Brindisi and Venice also afford strong proof that the disease is not imported into Europe from India. For several months past there has hardly been a case of cholera in Bombay, but the revitalization of the disease in Italy is a proof of Dr. Cunningham's contention that cholera is always present more or less in all countries.

Assistance afforded by Colonel Ducat, R.E.

197. During the year I have received great assistance from Colonel Ducat, R. E., Consulting Sanitary Engineer, especially in connection with the sewerage arrangements of public buildings in Bombay. He was unable to proceed to Ahmedabad before October. Eleven years ago I brought the exceptionally insanitary condition of this city to the notice of Government, and although year by year the very high death-rate has attracted attention, nothing has been done with a view of removing the causes which have led to such a terrible mortality.

Mortality in Ahmedabad during 11 years ending 1885.

198. The following table shows the number of deaths and ratio per 1,000 of population under each class of disease and from all causes which have occurred in the city of Ahmedabad during the 11 years ending 1885;—

Years.	Population.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000.	Small-pox. Number.	Small-pox. Ratio per 1,000.	Fevers. Number.	Fevers. Ratio per 1,000.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000.	Injuries. Number.	Injuries. Ratio per 1,000.	Other Causes. Number.	Other Causes. Ratio per 1,000.	All Causes. Number.	All Causes. Ratio per 1,000.
1875	116,873	257	2·20	16	·14	3,614	30·92	154	1·32	28	·24	2,535	21·69	6,604	56·51
1876	116,873	310	2·55	2	·02	3,553	29·21	162	1·33	28	·23	2,219	18·24	6,274	51·59
1877	116,873	103	0·88	5	·04	3,325	28·45	78	0·67	104	·89	1,970	16·86	5,585	47·78
1878*	116,873	503	4·30	8	·06	5,277	45·15	266	2·27	11	·09	2,337	20·42	8,452	72·31
1879	116,873	18	0·15	..	..	5,900	50·48	197	1·69	14	·12	2,124	18·17	8,253	70·61
1880	116,873	..	..	..	..	3,740	32·00	61	0·52	20	·17	1,909	13·76	5,430	46·46
1881	124,767	117	0·95	..	..	4,378	35·65	158	1·29	12	·09	2,160	17·59	6,825	55·57
1882	124,767	115	0·94	..	..	3,128	25·45	90	0·73	26	·21	1,704	13·87	5,061	41·20
1883†	124,767	58	0·46	1	·01	3,026	24·25	82	0·66	21	·17	1,902	15·24	5,090	40·80
1884	124,767	59	0·47	3	·02	4,013	32·16	73	0·59	9	·07	1,966	15·76	6,123	49·07
1885	124,767	49	0·39	..	..	4,566	36·60	103	0·82	16	·13	1,995	15·99	6,729	53·93
Total ..	1,325,073	1,689	1·20	35	0·03	44,518	33·60	1,424	1·07	289	·22	22,571	17·03	70,426	53·15
Mean for 11 years ..	120,461	144	1·20	3	0·02	4,047	33·60	130	1·08	26	·22	2,052	17·03	6,402	53·15

* Census of 1872. † Census of 1881.

199. This table shows the indubitable fact that the residents in Ahmedabad are dying at rates which without being an alarmist I may truly term appalling. It also shows that cholera has been present for 10 out of the 11 years, so it may be said to be endemic; but the enormously high ratio for deaths from fevers and from other causes show that there are at Ahmedabad some intensified insanitary conditions at work which destroy the lives of the residents in such happily unusual numbers. The principal causes which have produced these results are without doubt, 1st, an impure water-supply; 2nd, the air which is breathed by the residents by day and by night is tainted with the emanation of their own excrement, and this is the effect of the numerous khalkuvas existing throughout the city. If any stronger proof of the extreme prevalence of localized insanitary conditions were wanting it is supplied by the following table, which shows the deaths during the last four years arranged according to ages. As the age periods under which the deaths are registered have been changed, it was not possible to take a longer period :—

Age period.	Under 1 year.	1 and under 5 years.	5 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	60 and upwards.
Population according to Census of 1881	3,756	12,543	33,141	28,678	19,295	13,813	11,012	8,443

Years.	Number of Births.	No. of Deaths at the following ages. Under 1 year.	1 and under 5 years.	5 and under 10 years.	10 and under 15 years.	15 and under 20 years.	20 and under 30 years.	30 and under 40 years.	40 and under 50 years.	50 and under 60 years.	60 years and upwards.
1882	5,352	1,584	917	127	95	109	324	422	334	367	782
1883	5,369	1,704	891	141	100	145	300	355	283	383	758
1884	5,244	2,297	1,076	212	104	175	379	391	339	400	750
1885	4,924	2,536	1,433	150	109	204	463	418	369	457	590
Total ..	20,889	8,121	4,317	630	408	633	1,466	1,586	1,325	1,607	2,910
Mean for 4 years ..	5,147	2,030	1,079	158	102	158	367	396	331	402	728
Ratio per 1,000 ..	41·25	333·58	86·02	12·61			15·50	20·52	22·96	36·50	85·04
Percentage on total deaths	..	35·30	18·77	7·26			6·37	6·89	5·76	6·99	12·66

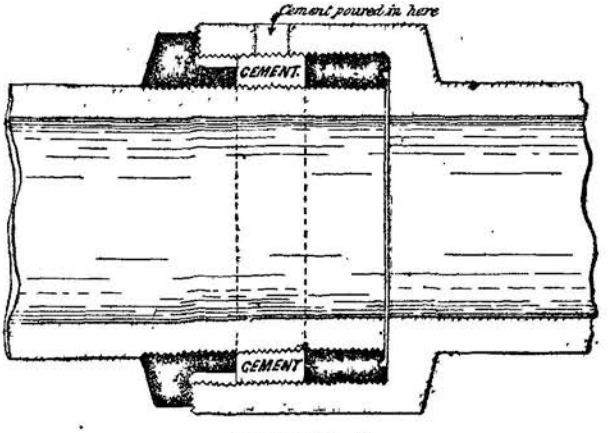
200. The rate of infant mortality is, as is well known, the best test of the sanitary condition of a place, and when this test is applied to Ahmedabad what is the result? By the latest returns the death-rate among infants under one year of age throughout the Presidency amounted to the high figure of 219·84 per 1,000, but in Ahmedabad during the last four years it has reached the excessive rate of 333·58 per 1,000. The percentage which the deaths under one year of age bear

to the total deaths is for the Presidency 21·24, but in Ahmedabad it was during the last four years 35·30. Colonel Ducat's report on the water-supply and sewerage at Ahmedabad is now under the consideration of the Municipal Commissioners, and I hope that his excellent proposals on these subjects will be carried out.

Colonel Ducat's tour in Sind.

201. After his inspection at Ahmedabad was finished, Colonel Ducat proceeded to Sukkur in Sind, and gave the Municipality there a most excellent scheme for providing the town with a plentiful supply of pure water and for reconstructing the drainage and sewerage. The Municipality entered eagerly into his views, and if funds can be raised I have no doubt his proposals will be carried out. He was engaged at this work at the close of the year, and was not able to visit Hyderabad until the middle of January. As his reports will be submitted to Government accompanied by the resolutions of each Municipality on his proposals, I merely refer to them here for the purpose of bringing strongly to notice what I think is very apparent, *viz.*, the want of knowledge regarding the details of sanitary engineering among Municipal and other Engineers up-country. It would appear to be highly desirable, therefore, that some attempt should be made to establish at some of our technical schools or colleges a chair of Sanitary Engineering where practical instruction in the details might be given. A sewerage scheme, if properly carried out, is one of the greatest boons that can be given to a community, but if due attention is not paid to the details it will prove a failure. The success of a sewerage scheme depends on the pipes being laid on a firm foundation and in perfectly straight lines, and the greatest care has to be taken to see that there is no leakage from the joints.

202. Whilst I was in England I enquired as to the best form of pipe for sewers, and I am indebted to Major Tulloch, R.E., for bringing to my notice Hassall's Patent Safety Joint, of which the following is a description given by the patentee, Mr. Parker :—



SECTION.

"This joint has been specially designed for the purpose of enabling Engineers to make thoroughly water-tight sewers with stoneware pipes. Hitherto, when stoneware pipes have been used in the construction of sewers in wet ground, they have permitted the inroad of subsoil water, thereby causing much additional expense in the treatment of the sewage at its outfall.

"The extra cost of treating sewage which contains a large percentage of subsoil water, over and above what may be termed *pure sewage*, far outweighs any additional expense in the cost of a special pipe beyond that of an ordinary one, particularly where pumping has to be resorted to. Whether sewage is dealt with by irrigation, or filtration, or precipitation, or by any chemical process, it must be confined to itself, and subsoil water must be rigidly excluded; for instance, if sewage is to be dealt with by irrigation, how much more land would be required (with the additional cost of preparing the same) if subsoil water is permitted to enter the sewer, than if only *sewage proper* has to be treated? besides which, the land is impoverished instead of being fertilized.

"No matter in which way the sewage is treated, as the volume is increased, so the cost of treatment is increased proportionately: therefore the extra cost of a special pipe that will make absolutely watertight sewers, though it be double or treble the cost of a common pipe, is a matter of little or no consequence when the disastrous results arising from leaky sewers and drains are fully considered. It must be remembered, too, that the cost of constructing sewers with Hassall's Patent Safety Joints is greater *in respect of the pipes only*, for every other expense, such as the excavation, shoring up ground, filling in earth, removing surplus soil, in fact every other expense, is the same for a common pipe as for a perfect one.

"The advantage of using Hassall's Patent Safety Jointed Pipes in dry ground is equally great as that attending their use in wet ground—for a pipe that will keep water out will keep sewage in—and this, it must be admitted, is of the utmost importance from a sanitary as well as from an economical point of view. Sewage must not be allowed to escape through leaky joints and so permeate the soil with filth getting under the foundation of houses and thereby causing the place to be in a more insanitary condition than when cesspools were in existence—then, again, it is frequently found that sewers are stopped up by the liquid portion of the sewage escaping through faulty joints, leaving the solid matter to subside in the pipes, which eventually become choked and have to be taken up and relaid.

"For *steep gradients*, Hassall's Patent Safety Jointed Pipes are admirably adapted, as it is quite impossible for the joints to wash out, whilst in *flat gradients* they are equally valuable—as there is not the slightest obstruction to the flow of sewage, the pipes being so well centred that they form a perfectly true invert line.

"Another great advantage in using Hassall's Patent Safety Jointed Pipes is that (in consequence of the joints being water-tight) the size of the Pipes may be considerably reduced from those ordinarily in use.

"Hassall's Patent Safety Joints are easily made and can be made in water, as when put together no water can possibly interfere with the cement-setting. A man can be putting the pipes in position all the day and the Clerk of Works can see 100 pipes jointed in an hour, so that he can be engaged in other works without watching every pipe being laid. In making the joint with Hassall's Patent Pipes the joint is actually tested.

"The material with which Hassall's Patent Pipes are made is of the very best description, being the best *stoneware* clay, the pipes are thoroughly well burnt, are perfectly true in the bore, specially glazed and free from blisters and firecracks, as none but selected pipes are sent from the Works. For Sewers and Drains and for Conduits for the Conveyance of Water Hassall's Patent Stoneware Pipes are far superior to iron pipes, there being no corrosion, neither are they subject to expansion and contraction as iron pipes are, and they are considerably less than half the cost of iron pipes.

"It is manifestly unfair to compare the cost of Hassall's Patent Safety Pipes with the cost of a common pipe, for one will *not* do what is required of it, whereas the other makes perfectly sound work and takes the place of iron pipes.

"Hassall's Patent Safety Jointed Pipes have been laid in some of the most water-logged districts in England, and have never yet failed to give entire satisfaction.

"References can be given to some of the most eminent sanitary engineers of the day who have used the pipes and can speak as to their value.

"The pipes may be tested, *free of any expense*, by Engineers, Surveyors, and Architects, at any place in the United Kingdom that they may select and in any manner they may desire."

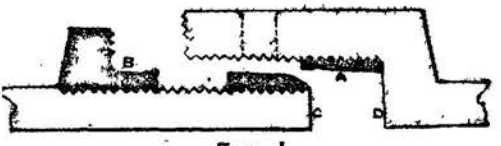


FIG. 1

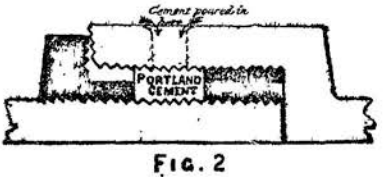


FIG. 2

203. MODE OF MAKING JOINT WITH HASSALL'S PATENT PIPES.

"Lay a band of plastic cement (which is supplied with the pipes) an eighth of an inch in thickness on the whole face of the lining cast inside the socket marked A in Figure 1. Also lay a similar band half an inch in thickness on the whole face of the collar round the spigot end of the pipe marked B; then place this spigot end inside the socket of the pipe lined with plastic cement and press the same home with an iron bar or other suitable appliance until the external end of the spigot of the one pipe marked C abuts against the inner shoulder within the socket of the other pipe marked D. The two bands of plastic cement will thus be compressed, thereby closing the joint between the two pipes, but leaving an annular space or groove between the inside of the socket of one pipe and the outside of the spigot end of the other pipe, which annular space is filled through the opening in the socket with liquid or semi-liquid neat Portland Cement which is poured down one side of the opening until it travels round the pipe showing itself on the other side, thereby driving out all air or water that may be in the groove and keying the whole joint together.

"The Portland Cement should be well mixed and free from lumps. A tin can with a spout and a wire strainer across the mouth of it is a convenient thing to use for pouring in the cement. The cement should not be mixed until it is required for use.

"Sufficient cement should be mixed in an iron pail or bucket to make 6 joints, and be stirred up well before pouring in."

---

204. "TESTIMONIAL FROM MAJOR HECTOR TULLOCH, R.E.

To

J. PARKER, ESQUIRE,

42, Dryden Street, Nottingham.

Local Government Board,
Whitehall, 30th November 1885.

SIR,

As Dr. Hewlett, Sanitary Commissioner for the Presidency of Bombay, asks for my opinion of your new Sewer Pipe Joint (Hassall's Patent), which I have now seen laid on two occasions, I have no hesitation in informing you that it is the best joint for Sewers which I know of.

The pipes are so true in bore, and the bituminous rings, being turned as if in a lathe, fit so exactly with each other, that the pipes can be laid in a perfectly straight line, and without any unevenness in the interior. Smaller sized pipes would answer where larger ones of the ordinary socket kind would be necessary, for the latter, never fitting accurately with each other, offer obstructions to the even and regular flow of sewage.

The joint practically consists of three joints, two bituminous ones, and a ring of neat Portland Cement between them. The efficiency of the joint, moreover, is not impaired if the bituminous rings get chipped or broken, for the cement, poured in from the top of the pipes, necessarily fills up every crevice, and effectually seals the joint against the sewage leaking out or the subsoil water leaking in.

This is the only pipe I know of, regarding which the engineer, without any misgiving as to causing delay in the laying of the pipes, can in his specification stipulate that no joint shall be made except in the presence of the Clerk of the Works. For even if work should be going on in half a dozen streets of the town at the same time, the pipes can be laid in position in each street without the cement being poured in until the Clerk of the Works visits the street, when, in a few minutes, he can see every joint made, and satisfy himself as to its security.

This, in my opinion, is one of the greatest advantages which Hassall's joint offers over all others, because it is the only one which is an absolute check on the carelessness of workmen, and this carelessness is the most serious difficulty engineers have to contend against in getting good work done. With your pipes, if the cement when poured down on one side does not come up at the other, it is certain that the pipes have been carelessly laid, and they can be taken up at once and the cause of the failure in the joint rectified. Practically the very act of forming the joint tests it. If the cement rises to the other side the joint is manifestly perfect; if it fails to rise there is something amiss, and the pipes can be pulled out and relaid, and the joint remade.

I am not aware at present of any other pipes in laying which it would be possible for a Clerk of Works to see every joint made in his own presence without causing an absolute stoppage to his works.

Hassall's joint seems specially suited for steep gradients and water-logged soils. When ordinary socket pipes are used, the cement is often washed out if the rush of the sewage is violent, but the inner bituminous ring in your pipe effectually protects the cement, so that the sewage cannot get at it to wash it out. And also in water-logged soils, the water must first pass through the outer bituminous ring before it can reach the cement: it must then pass through the cement joint, and finally through the inner bituminous joint. It is these three joints combined in one joint which make your pipes so perfectly water-tight in water-logged soils.

The only wonder to me is that this very simple mode of jointing pipes should not have been invented before. There can be no doubt that it is a

decided advance in sanitary engineering, and must lead to a better style of sewer-work throughout the country.

I am,

Yours faithfully,

(Signed) H. TULLOCH, Major,

Royal Engineers."

205. I am informed by Mr. Parker, the Patentee, that the prices of these pipes in trucks alongside ship, either at Liverpool or Birkenhead, carefully packed and ready for shipment, are as follows :—

4 inches in diameter.	6 inches.	9 inches.	12 inches.	15 inches.	18 inches in diameter.
s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1 11 per yard.	2 2	3 2	4 6¾	7 1	10 4½ per yard lineal.

206. I brought out to Bombay three sets of samples of these pipes, one of which I handed over to the Municipal Commissioner of the City of Bombay, the second I gave to the Consulting Sanitary Engineer for the Presidency, and the third is in my office in the Secretariate, where any one interested in the subject can see them. I also sent the description of these pipes to the Secretary to Government, Public Works Department, for distribution to the officers of the Department, as in my opinion they will be found useful as conduits for the conveyance of water as well as in sewerage works, as they have been tested to stand a pressure of 40 feet to the square inch.

207. I must also record that some Municipalities, which would only be too glad to avail themselves of Colonel Ducat's advice on sanitary matters, inform me that they cannot afford to pay for his services according to the rate laid down by Government. If Government were pleased to rule that they would pay Colonel Ducat his salary, leaving his actual travelling expenses and deputation allowances to be borne by the Municipalities who employ him, it would be a very great boon, and would enable them to obtain the very best advice on points of sanitary engineering at a reasonable cost. I venture to bring to the notice of Government that the sanitation of our towns has a wider importance than at first sight appears. For example, the health of towns where great pilgrimages are held, such as Trimback, Násik, Pandharpur, Dákor, Yellápur, &c., affects a wider population than belongs to the respective towns, and perhaps this consideration may induce Government to take a favourable view of the proposal.

Village sanitation.

208. During the year the subject of village sanitation and conservancy was before Government, who called for reports from the Commissioners of Divisions and of Sind and from all Collectors on the subject; I also had the honour to submit to Government a memorandum which I drew up for the information and guidance of village patels throughout the Presidency for the purpose of showing them what the several insanitary conditions, which obtain in villages, are, and how they should be remedied, and also to instruct them in what cases they can, when authorized, put in force the powers conferred on them by Bombay Act VIII. of 1867.

Government Resolution on village conservancy and sanitation.

209. Although it was not published during the year under report I cannot refrain from mentioning that Government has during the current year been pleased to issue a Resolution setting forth the principles on which a draft bill is to be prepared to give effect to the measures proposed by Government for carrying out in a more efficient manner the sanitation and conservancy in villages in the Presidency. If these principles are embodied in a legal enactment, in my opinion no more important measure, or one better calculated to exert a beneficial effect on the people of the country, will ever have been

passed; and it is indeed gratifying after such long and weary years of waiting to be able to record that at last "Government have determined to grapple with such evils as they believe to be removable or avoidable under the existing conditions of Indian society."

Difficulty may be expected at first which will pass off.

210. Of course any interference with established custom among so conservative a race as the peasantry of this country must be expected at first to be met by passive obstruction; but I am certain, if endeavours are persistently made to teach the people and to show them the injury which is caused to themselves and their families by the neglect of sanitation, that as time goes on, they themselves will ask that even more stringent laws for the preservation of health may be passed.

Necessity for affording means of acquiring elementary education.

211. In my report for 1876 I said: "There is nothing in my opinion which would tend to create among the people a desire to raise themselves out of their filth or to help themselves in sanitary matters more than the establishment in every village throughout the Presidency of a school where elementary education could be provided." The experience I have gained during the ten years which have elapsed since the above extract was written has still further impressed me with the necessity for the spread of education among the peasantry. The village school-master would be most useful in teaching, not only the young but also the older members of the community, the aims and objects of sanitation. He could, as no one else could, explain to the villagers assembled in conclave the risks they and their families run from the existing state of things, and could at all events read and explain simple tracts pointing out what the wrong conditions are and what measures should be taken to remove them.

Measures for extension of education among females.

212. I also in the same report urged the extension of female education for the like object. Custom rules the mode of life among the village community, but if by any possibility the women can be taught true principles of sanitation I am confident that much that is objectionable in the native custom of rearing children and in domestic arrangements would be speedily swept away, for I am convinced that female influence plays a far more important part in the affairs of the men in India than is generally supposed.

The Countess of Dufferin's Fund.

213. For this reason the movement in affording medical aid to women set on foot by Lady Dufferin and inaugurated in this Presidency under the auspices of Lady Reay seems to me as a sanitary officer to be of the highest value, and I regard it as all the more valuable because it is independent of Government.

In course of time when native ladies have studied the art of medicine, which I hope they will do in large numbers, they cannot fail to be as it were missioners of sanitary science and to disseminate true sanitary doctrines in every house they enter professionally. Of course this must be a work of time, but it is a matter of great gratification that at length measures are being taken which will be the means of saving life and ensuring health and therefore happiness throughout the length and breadth of India.

Unhealthy condition of the City of Poona.

214. Among other important matters which have occurred during the year, the unhealthy condition of the city of Poona has attracted attention. In it there were no less than 3 separate outbreaks of cholera during the year, and the increasing unhealthiness of the city is a matter of much comment. In the opinion of the Deputy Sanitary Commissioner, with which I concur, the general rising of the level of the sub-soil water since the opening of the Khadakvásla Canal, accounts for the increased sickness which has of late years been observed, especially at the setting in of the cold season, and this is due to percolation from the main canal and from the branch canals which have so injudiciously been carried through the town.

Danger of irrigation without drainage.

215. The extension of irrigation by means of canals is no doubt an inestimable boon in certain parts of the country, as the introduction of water not only enables the inhabitants to raise additional crops, but also ensures a never-failing

supply of pure drinking water; but at the same time it must never be forgotten that irrigation without the provision of drainage is a well-recognized source of preventible disease. The necessity for agricultural drainage has been repeatedly brought to notice by the Army Sanitary Commission, and a notable instance of the danger entailed by the want of it will be found in the immediate vicinity of our largest military Cantonment in this Presidency. The condition of the soil between the Ghorpuri Cavalry Lines and the village of Moondwa, about 2½ miles to the east of the cantonment, must afford sufficient proof, even to the most sceptical, of the danger entailed by the too profuse application of water to an undrained soil. In the month of April, the hottest month of the year, this water stands stagnant in the roadside ditches, and the water level in a well close alongside the road is seen to be flush with the soil, whilst the ground for a large extent is covered with rank rushes. I was informed that part of the area had become so rotten that sugarcane will not grow, and that in the fields where it does grow an increased amount of poudrette is necessary. Can any condition be more deplorable in the immediate vicinity of a large military station and on land adjacent to that part of the cantonment where the Ghorpuri Lines are situated, the barracks in which have of late years been so notoriously unhealthy?

Work of Deputy Sanitary Commissioners.

216. As usual it is my pleasing duty to report that I have received every assistance from the Deputy Sanitary Commissioners, who in their respective charges have been most zealous in the performance of their duties.

Surgeon-Major MacRury.

217. Surgeon-Major MacRury has remained throughout the year in charge of the Central Registration District. I am greatly indebted to him for the effective supervision he has maintained over each detail of his work. To his administrative capacity is due the very large increase observed in primary vaccinations throughout his district, and he is gradually getting the staff of vaccinators into a high state of efficiency. He has particularly interested himself in promoting sanitary reform both in the towns and villages in his district. He visited Pandharpur during the *jatrá* held in July, and rendered most valuable assistance in the severe epidemic of cholera which broke out in the town, and which rendered the dispersion of the pilgrims necessary. His report on this outbreak, which was submitted to Government, contained most valuable suggestions for ensuring proper precautionary measures in future. Dr. MacRury acted as Sanitary Commissioner, during my absence on privilege leave, with marked ability and success.

Surgeon Channer.

218. Surgeon Channer was throughout the year in charge of the Southern Registration District, and I have again to bring to prominent notice the excellent service he performed in connection with a severe epidemic of cholera in his district. He submitted a very interesting and instructive report on the outbreak of cholera in the táluka of Sampgaon, which called forth the commendation of Government. He also submitted especial reports on 23 towns he had inspected, and I hope his suggestions regarding them will, as far as possible, be carried out.

Surgeons Peacocke, Street and Clarkson.

219. In the Western Registration District, Surgeon Peacocke was in charge until May, when he proceeded home on medical certificate. He evinced much zeal, and I was much indebted to him for many useful suggestions regarding his district. He was succeeded by Surgeon Street, who remained in charge until the 2nd December. I consider Surgeon Street to be a most promising officer, and I was much pleased with his work at Násik. Surgeon Clarkson, the permanent incumbent, rejoined his appointment on the above date.

Dr. Colah.

220. Dr. Colah continued in charge of the Eastern Gujarát Registration District during the year, and has done really excellent service. His reports are characterized by ability and thoroughness, and his zeal in the performance of his duties is beyond praise. His efforts to raise the sanitary condition of the principal towns in his district deserve to meet with success.

Surgeon Parker.

221. Surgeon Parker was in charge of the Sind District throughout the year. He has especially interested himself in the introduction of sanitary reform in villages, and has submitted reports of no less than 176 villages. His advice to Collectors during the severe epidemic of cholera throughout the Province was very sound, and in some instances he persuaded the people to move their villages to a fresh site.

Surgeon Tully.

222. Surgeon Tully continued throughout the year to act as Superintendent of Vaccination in Western Gujarát, and has performed his duties with much zeal and to my entire satisfaction.

Surgeon MacCartie.

223. Surgeon MacCartie continued throughout the year to perform his duties as Health Officer of the Port with ability and zeal. This officer deserves credit for the marked tact he has exhibited in the performance of his duties, which sometimes demand much forbearance.

Assistant Surgeons Sukhárám Arjun and Desái.

224. Assistant Surgeon Sukhárám Arjun was in charge of the office of Superintendent of Vaccination, Presidency Circle, at the beginning of the year, and his untimely death on the 16th April was recorded in last year's report. He was succeeded by Assistant Surgeon Desái, who has conducted his duties to my satisfaction.

Inspection by Civil Surgeons.

225. During the year, 133 towns and 1 village were inspected by Civil Surgeons in the several Collectorates of this Presidency, being 28 more than last year.

Statement showing the Number of Towns and Villages inspected by Civil Surgeons during 1885.

District.	By whom inspected.	Number of Towns inspected.	Number of Villages inspected.	Total Number inspected.
Khándesh	Surgeon Boyd	7	...	7
Násik	Honorary Surgeon Leahy ...	6	...	6
Thána	Surgeon Kirtikar...	9	...	9
Colába	Assistant Surgeon M. F. Pereira...	2	...	2
Ahmednagar	Surgeons-Major DeTatham and R. H. Batty	6	...	6
Poona	Surgeon-Major H. Cook... ...	10	...	10
Sholápur	Apothecary Scroggie	7	...	7
Sátára	Surgeons Briggs and Greany ...	9	...	9
Ratnágiri	Surgeon McCalman	2	...	2
Belgaum	Surgeon-Major Hughes	7	...	7
Dhárwár	" " W. McConaghy...	3	...	3
Bijápur	Assistant Surgeons E. Mackenzie and K. S. Engineer	4	...	4
Kánara	Surgeon Henderson	3	1	4
Surat	Surgeon-Major Banks	11	...	11
Broach	.....	...	...	...
Kaira	Surgeon Corkery	6	...	6
Panch Maháls	Surgeon Anderson	3	...	3
Ahmedabad	Surgeon-Major Robb	7	...	7
Karáchi	" " Keith	7	...	7
Hyderabad	Surgeons-Major Keelan and DeTatham	11	...	11
Thar and Párkar	.....	...	...	...
Shikárpur	Surgeons Dimmock and Street ...	7	...	7
Sukkur	Surgeon-Major Bartholomeusz ...	6	...	6
		133	1	134

The periodical inspection of villages and towns by Civil Surgeons cannot fail to do good, as their suggestions for the improvement of the sanitary condition of these places are very valuable.

T. G. HEWLETT,

Deputy Surgeon General,

Sanitary Commissioner.

APPENDIX I.

GENERAL HISTORY OF VACCINATION FOR THE YEAR 1885-86.

Changes amongst the Supervising Officers.

1. The changes amongst the Supervising Officers during 1885-86 (1st April 1885 to 31st March 1886) were as follows:—

(*a*) In the Western Registration District, Surgeon Peacocke having obtained furlough to Europe on medical certificate for one year delivered over charge to Surgeon Kirtikar, the Civil Surgeon of Thána, on 11th May 1885, who in his turn handed it over to Surgeon Street on 9th July 1885. Surgeon Clarkson, the permanent incumbent, took over charge from Surgeon Street on 2nd December 1885.

(*b*) In the Presidency Circle Assistant Surgeon Ganesh Ramchandra Desái took charge of his appointment as Superintendent of Vaccination on 16th May 1885, in succession to the late Assistant Surgeon Sakhárám Arjun.

(*c*) In the Western Gujarát Circle Surgeon Barker, the Civil Surgeon of Rájkot, was in charge of the office of the Superintendent of Vaccination during the absence of Surgeon E. Tully on privilege leave from 15th August to 14th October 1885. Surgeon E. Tully was confirmed in his acting appointment as Superintendent of Vaccination, with effect from 27th October 1885, *vice* Surgeon-Major J. T. Welsh, retired.

Strength of the Department.

2. The subjoined table shows in detail the changes in the strength of the Department during the years 1884-85 and 1885-86:—

No.	Districts and Circles.	Area in Square Miles.	Population according to Census of 1881.	Years.	Deputy Sanitary Commissioners.	Superintendents of Vaccination.	Inspectors of Sanitation and Vaccination.	Assistant Superintendents of Vaccination.	Clerks and Karkuns.	Number of Vaccinators. Government. Civil.	Military.	Municipal.	Cantonment.	Local Fund. Vaccinators.	Candidates.	Native States.	Total.	Number of Peons. Government.	Municipal.	Local Funds.	Native States.	Total.	Total Strength.
1	Western Registration District	26,321·6	3,403,921	1884-85	1	..	6	..	2	..	..	5	1	57	2	2	67	10	4	57	2	73	149
				1885-86	1	..	6	..	2	..	..	6	..	58	2	3	69	10	2	58	2	72	150
2	Presidency Circle ..	22	773,196	1884-85	..	1	..	1	17	..	..	9	..	..	..	..	9	..	3	..	..	3	31
				1885-86	..	1	..	1	17	..	..	9	..	..	..	..	9	..	3	..	..	3	31
3	Central Registration District	30,252·1	4,858,709	1884-85	1	..	6	..	2	..	..	7	1	62	5	8	83	10	7	62	10	89	181
				1885-86	1	..	6	..	2	..	..	8	1	66	6	10	91	10	7	66	10	93	193
4	Southern Registration District	24,390·4	4,132,186	1884-85	1	..	5	1	2	..	..	7	..	47	4	28	88	8	6	47	30	91	186
				1885-86	1	..	5	1	2	..	..	8	..	53	4	30	95	8	6	53	31	98	202
5	Eastern Gujarát Registration District ..	27,712·075	4,162,314	1884-85	1	..	5	..	2	..	..	7	..	39	4	21	71	9	8	39	18	74	153
				1885-86	1	..	5	..	2	..	..	7	..	41	4	24	76	9	8	41	24	82	166
6	Western Gujarát Circle	27,256·48	2,920,377	1884-85	..	1	..	2	2	2	..	..	..	..	..	42	44	8	..	..	42	50	99
				1885-86	..	1	..	2	2	2	..	..	..	..	..	42	44	8	..	..	42	50	99
7	Sind Registration District	54,123·01	2,542,976	1884-85	1	1	6	..	2	..	..	7	..	50	5	3	65	10	5	50	3	68	143
				1885-86	1	1	6	..	2	..	..	7	..	50	5	3	65	10	5	50	3	68	143
8	Baroda Circle	8,670	2,185,005	1884-85	..	..	3	..	..	..	..	..	..	..	..	31	31	..	..	..	34	34	68
				1885-86	..	..	3	..	..	..	..	..	..	..	..	31	31	..	..	..	34	34	68
9	Cutch Circle	6,500	512,084	1884-85	..	..	..	1	..	..	..	..	..	..	..	17	17	..	..	..	19	19	37
				1885-86	..	..	..	1	..	..	..	..	..	..	..	17	17	..	..	..	19	19	37
10	Aden	11·6	34,360	1884-85	..	..	..	..	..	..	..	1	..	..	..	..	1	..	1	..	..	1	2
				1885-86	..	..	..	..	..	..	..	1	..	..	..	..	1	..	1	..	..	1	2
	Military Stations ..	..	..	1884-85	..	..	..	..	..	..	3	..	..	..	..	..	3	..	..	..	..	..	3
				1885-86	..	..	..	..	..	..	3	..	..	..	..	..	3	..	..	..	..	..	3
	Total ..	205,159·265	25,615,523	1884-85	5	3	31	5	29	2	3	43	2	255	20	152	477	55	34	255	163	502	1,052
				1885-86	5	3	31	5	29	2	3	46	1	268	21	160	501	55	34	266	165	520	1,094

In the Western Registration District there has been an increase of 1 municipal vaccinator for the towns of A'libág, Pen and Uran, 1 local fund vaccinator and 1 peon for the Kolába Collectorate, and 1 vaccinator for the Janjira State. The Cantonment vaccinator for Devláli and 2 municipal peons have been reduced. In the Central District one municipal vaccinator has been employed in the town of Vengúrla, 4 local fund vaccinators and 4 peons in the Sátára Collectorate, and 2 Native State vaccinators in the Bhor and Sávantvádi States. In the Southern District 1 municipal vaccinator was employed in the town of Athni, Belgaum Collectorate, 6 additional local fund vaccinators and 6 peons in the Collectorates of Belgaum (4) and Dhárwár (2), and 2 more vaccinators in Native States, *viz.*, Shirhatti and Kolhápur Town. The Nipáni municipal vaccinator ceased working in August last. In Eastern Gujarát district the establishment was supplemented by an addition of 2 local fund vaccinators and 2 peons for the Kaira Collectorate, and 3 vaccinators and 6 peons for the Mahi Kántha Agency. In Western Gujarát 1 female vaccinator and a peon entertained to visit the courts of all the Chiefs of Káthiáwár have been reduced from 1st October, as the work performed was not in proportion to the expense incurred. In the entire Department there has been an increase of 24 vaccinators and 18 peons—in all 42 persons.

Work amongst the Civil and Military Population.

3. The following table contrasts the work amongst the civil and military population during the year under report with that for 1884-85 :—

Establishment.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.
In Civil life.												
Itinerant	774,311	830,763	56,452 / 7·29	..	59,999	51,839	..	8,160 / 13·60	834,310	882,602	48,292 / 5·79	..
Dispensary	24,014	20,298	..	3,716 / 15·47	1,780	761	..	1,019 / 57·25	25,794	21,059	..	4,735 / 18·36
Total ..	798,325	851,061	56,452 / 7·07	3,716 / 0·47	61,779	52,600	..	9,179 / 14·86	860,104	903,661	48,292 / 5·615	4,735 / 0·55
In Army life.												
Native Army ..	3,554	3,120	..	434 / 12·21	1,435	681	..	754 / 52·54	4,989	3,801	..	1,188 / 23·81
British Army ..	328	206	..	122 / 37·20	147	122	..	25 / 17·01	475	328	..	147 / 30·95
Total ..	3,882	3,326	..	556 / 14·32	1,582	803	..	779 / 49·24	5,464	4,129	..	1,335 / 24·43
Total for the whole Presidency ..	802,207	854,387	56,452 / 7·04	4,272 / 0·53	63,361	53,403	..	9,958 / 15·72	865,568	907,790	48,291 / 5·58	6,070 / 0·70

It will be observed that there were 854,387 persons primarily vaccinated and 53,403 re-vaccinated against 802,207 and 63,361 in 1884-85, showing a net increase of 52,180, or 6·51 per cent., under primary vaccinations, and a net decrease of 9,958, or 15·72 per cent., under re-vaccinations. The rate of decrease in primary vaccinations was very high amongst British Troops, being 37·20 per cent., and in re-vaccinations it was very high amongst dispensaries, being 57·25 per cent. The highest decrease (30·95 per cent.) under total operations was amongst British Troops. On the whole, there has been an increase of 42,222; or, in other words, for every 100 persons operated on in 1884-85 the numbers for this year have been 104·88.

Number of infants successfully vaccinated in each Collectorate.

4. The following table shows for the last two years the number of infants successfully vaccinated in each Collectorate, exclusive of Native States. The birth and death statistics are taken for the calendar year in calculating the number, because infants are generally not vaccinated until 3 months after birth :—

No.	Collectorates.	Years.	Children vaccinated successfully. Those under 1 year.	Those between 1 and 6 years.	Children available for Vaccination.	Births returned as having been registered.	Deaths registered among Children under 1 year.
1	Khándesh	1884-85 ...	25,536	12,074	38,117	45,170	7,053
		1885-86 ...	26,593	11,662	40,368	48,595	8,227
2	Násik	1884-85 ...	13,154	6,195	21,296	26,263	4,967
		1885-86 ...	14,300	5,429	24,056	29,947	5,891
3	Thána	1884-85 ..	9,918	8,043	20,909	24,644	3,735
		1885-86 ...	9,929	8,855	19,378	22,559	3,181
4	Kolába	1884-85 ...	8,512	4,515	11,482	13,326	1,844
		1885-86 ...	9,559	3,901	11,720	13,483	1,763
5	Bombay City	1884-85 ...	13,449	1,980	8,037	14,377	6,340
		1885-86 ...	13,547	2,246	8,420	14,685	6,265
6	Ahmednagar	1884-85 ...	19,365	7,013	24,796	30,536	5,740
		1885-86 ...	22,355	6,745	25,930	32,444	6,514
7	Poona	1884-85 ...	13,809	9,947	25,430	30,741	5,311
		1885-86 ...	15,306	10,978	27,163	32,914	5,751
8	Sholápur	1884-85 ...	17,117	7,258	19,253	23,223	3,970
		1885-86 ...	18,906	5,192	21,098	25,838	4,740
9	Sátára	1884-85 ...	24,334	12,814	37,633	45,484	7,851
		1885-86 ...	29,590	10,581	40,316	48,467	8,151
10	Ratnágiri	1884-85 ...	11,760	12,937	19,002	20,599	1,597
		1885-86 ...	17,722	14,025	22,623	24,175	1,552
11	Belgaum	1884-85 ...	13,144	9,471	29,464	35,139	5,675
		1885-86 ...	18,688	10,166	32,786	37,949	5,163
12	Dhárwár	1884-85 ...	17,657	11,094	30,970	38,342	7,372
		1885-86 ...	20,185	10,271	34,590	42,201	7,611
13	Bijápur	1884-85 ...	13,467	9,230	20,968	24,847	3,879
		1885-86 ...	14,301	6,812	24,798	28,571	3,773
14	Kánara	1884-85 ...	2,785	5,970	9,663	12,327	2,664
		1885-86 ...	2,829	5,674	9,958	12,596	2,638
15	Surat	1884-85 ...	11,531	5,375	18,059	21,455	3,396
		1885-86 ...	12,329	6,726	19,326	23,031	3,705
16	Broach	1884-85 ...	7,666	2,609	8,898	11,454	2,566
		1885-86 ...	6,756	1,890	9,284	12,459	3,175
17	Kaira	1884-85 ...	17,667	6,128	24,305	30,225	5,920
		1885-86 ...	19,095	5,633	24,556	31,287	6,731
18	Panch Mahále	1884-85 ...	5,726	2,893	7,838	8,926	1,088
		1885-86 ...	6,731	2,605	8,713	9,997	1,284
19	Ahmedabad	1884-85 ...	22,784	4,800	22,073	28,844	6,771
		1885-86 ...	22,706	4,308	25,107	32,474	7,367
20	Karáchi	1884-85 ...	11,431	3,688	8,642	10,637	1,995
		1885-86 ...	12,126	3,862	8,307	10,368	2,061
21	Hyderabad	1884-85 ...	15,350	3,845	10,183	12,757	2,574
		1885-86 ...	16,681	4,725	11,662	13,853	2,191
22	Thar and Párkar	1884-85 ...	5,712	2,361	4,387	5,014	627
		1885-86 ...	6,677	3,105	5,994	6,671	677
23	Shikárpur	1884-85 ...	22,778	3,788	14,148	17,905	3,757
		1885-86 ...	22,834	4,493	14,255	16,232	1,977
24	Upper Sind Frontier	1884-85 ...	3,994	1,365	2,027	2,488	461
		1885-86 ...	3,774	1,540	1,414	1,635	221
	Total ...	1884-85 ...	328,646	155,393	437,580	534,723	97,143
		1885-86 ...	363,519	151,424	471,822	572,431	100,609

This year the successful vaccinations fell short of the total registered births *minus* deaths amongst those under 1 year old, and in the first 19 districts, except Bombay, the same result is found, and yet the figures are higher than those for last year in the return of infants, and there is a greater proportionate number of successful cases in most of the districts, except Broach, Ahmedabad and Upper Sind Frontier. On the whole, out of 471,822 infants available for vaccination, 363,519, or 77·05 per cent., have been protected. Last year the percentage was 75·11.

Primary Vaccinations.

5. The next table shows the number of persons primarily vaccinated, as also the increase or decrease for each of the last ten years :—

Primarily vaccinated.	Years ending 31st March. 1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Persons	690,639	732,184	670,055	561,939	586,501	642,505	729,323	792,206	826,965	802,207	854,387
Increase	..	41,545	..	..	24,562	56,004	86,818	62,883	34,759	..	52,180
Decrease	..	..	62,129	108,056	..	..	..	..	..	24,758	..

Results in Primary Vaccinations.

Out of 854,387 persons primarily vaccinated, 818,135 cases, or 95·76 per cent., were successful, or 0·47 per cent. more than in 1884-85. The number of unsuccessful cases was less than that in the preceding year, being 15,891 against 18,948. 2,193 persons were operated on a second time on account of the failure of the first operation, and in 22,554 cases the result was unknown, as the children were not again brought for inspection. The following table shows the number of persons primarily vaccinated, and the success among them for the past 10 years :—

	Years ending 31st March.									
	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Number of persons primarily vaccinated.	732,184	670,055	561,969	586,501	642,505	729,323	792,206	826,965	802,207	854,387
Do. successfully.	698,148	630,590	531,221	557,840	616,518	703,923	761,745	791,323	764,445	818,135
Percentage of success	95·35	94·11	94·53	95·11	95·95	96·52	96·16	95·69	95·29	95·76

Re-vaccinations.

6. The number of persons re-vaccinated and the success among them for the last 10 years are given below :—

	Years ending 31st March.									
	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Number of persons re-vaccinated.	82,993	80,893	69,177	63,122	62,479	56,769	66,505	56,874	63,361	53,403
Do. successfully	66,770	60,847	49,830	45,435	45,481	40,675	46,420	37,657	41,255	36,191
Percentage of success ..	80·45	75·22	72·03	71·98	72·79	71·65	69·80	66·21	65·11	67·77

Results in Re-vaccinations.

During the year, 53,403 persons were re-vaccinated against 63,361 for 1884-85. In 46 instances the re-vaccinations were repeated, in 6,405 instances the results could not be ascertained, and in 10,853 the operation failed. The number of successful cases was 36,191, or 67·77 per 100, against 65·11 in the preceding year.

Total Operations.

7. The subjoined table shows the total number of persons primarily vaccinated and re-vaccinated (taken together), as also the number of successful cases during each of the last 10 years :—

	Years ending 31st March.									
	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Persons operated on	815,177	756,948	631,146	649,623	704,984	786,092	858,711	883,839	865,568	907,790
Do. successfully..	764,918	691,437	581,051	603,275	661,994	744,598	808,165	828,980	805,700	854,326
Percentage of success ..	93·83	92·08	92·00	92·87	93·90	94·72	94·11	93·70	93·08	94·11

Results in Total Operations.

It will be seen that the total number of persons operated on were 907,790, and of these 854,326, or 94·11 per cent., were successful. In 1884-85 the percentage was 93·08. There were 2,239 persons operated on more than once; the "unsucessful" numbered 26,744, and the "unknown" cases were 28,959.

Primary Vaccinations, Re-vaccinations and Total Operations by Districts and Circles.

8. The details of the total number of persons operated on for the last two years by Districts and Circles of vaccination, together with the percentages of increase and decrease, are shown on the next page :—

Districts and Circles.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.
Western Registration District.	96,072	97,250	1,178 / 1·23	..	1,744	1,561	..	183 / 10·49	97,816	98,811	995 / 1·02	..
Presidency Circle ..	16,168	16,521	353 / 2·18	..	2,059	788	..	1,271 / 61·73	18,227	17,309	..	918 / 5·04
Central Registration District.	155,201	180,189	24,988 / 16·10	..	5,469	3,220	..	2,249 / 41·12	160,670	183,409	22,739 / 14·16	..
Southern Registration District.	133,853	140,808	6,955 / 5·20	..	5,034	5,222	188 / 3·73	..	138,887	146,030	7,143 / 5·14	..
Eastern Gujarát Registration District.	123,795	132,407	8,612 / 6·96	..	2,310	1,965	..	345 / 14·94	126,105	134,372	8,267 / 6·56	..
Western Gujarát Circle .	101,244	104,864	3,620 / 3·58	..	25,648	18,922	..	6,726 / 26·22	126,892	123,786	..	3,106 / 2·45
Sind Registration District. .	83,736	88,446	4,710 / 5·62	..	19,035	18,644	..	391 / 2·05	102,771	107,090	4,319 / 4·20	..
Baroda	66,811	68,019	1,208 / 1·81	..	288	2,070	1,787 / 621·45	..	67,094	70,089	2,995 / 4·46	..
Cutch	20,486	20,919	433 / 2·11	..	188	196	8 / 4·26	..	20,674	21,115	441 / 2·13	..
Aden, Muscat, Khelat and Bushire.	959	1,638	679 / 70·80	..	9	12	3 / 33·33	..	968	1,650	682 / 70·45	..
British Army	328	206	..	122 / 37·20	147	122	..	25 / 17·01	475	328	..	147 / 30·95
Native do.	3,554	3,120	..	434 / 12·21	1,435	681	..	754 / 52·54	4,989	3,801	..	1,188 / 23·81
Total ..	802,207	854,387	52,736 / 6·57	556 / 0·06	63,361	53,403	1,986 / 3·13	11,944 / 18·85	865,568	907,790	47,581 / 5·50	5,359 / 0·6

Primary Vaccinations. Increase and Decrease by Districts and Circles.

9. In primary vaccinations an increase of 52,736, or 6·57 per cent., took place in all the districts and circles in the following sequence :—Aden, Muskat, Khelat and Bushire, Central, Eastern Gujarát, Sind, Southern, Western Gujarát, Presidency Circle, Cutch, Baroda and Western Registration Districts, where the rate is only 1·23 per cent. In the Central Registration District the very large increase of 24,988 operations under primary vaccination is due to the energetic supervision maintained by Surgeon-Major MacRury. There was a decrease of 556, or only 0·06 per cent., amongst the British and Native Troops.

Re-vaccinations. Increase and Decrease by Districts and Circles.

10. In re-vaccinations an increase of only 1,986, or 3·13 per cent., is distributed over Baroda, Aden, Muskat, Khelat, and Bushire, Cutch and Southern Registration District, where the rate is 3·13 per 100. The decrease in other districts amounts to 11,944, or 18·85 per cent. These districts stand in the following sequence :—The Presidency Circle, Native Army, Central, Western Gujarát, British Army, Eastern Gujarát, Western and Sind Registration Districts; in the last-named the rate was 2·05 per cent.

Total Operations. Increase and Decrease by Districts and Circles.

11. As regards total operations an increase of 47,581, or 5·50 per cent., is to be observed in Aden, Muskat, Khelat, and Bushire, Central, Eastern Gujarát, Southern, Baroda, Sind, Cutch and Western Registration District, in which the smallest rate of increase, 1·02 per cent., took place, whilst a decrease of 5,359, or 0·62 per cent., is distributed over the British and Native Army, and the Presidency and Western Gujarát Circles, in which, however, it only amounted to 2·45 per cent. The net increase is 42,222, or 4·88 per cent.

Districts and Circles.	Years.	Persons primarily vaccinated. Caste. Christians.	Hindus.	Musalmans.	Pársis.	Other Castes.	Age. N.—Number. S.—Successful. Under 1 year.	Between 1 and 6 years.	All other Ages.	Total Number of Persons operated on— P.—Primary Vaccinations. R.—Re-vaccinations. Sex. Males.	Females.	Total.
Western Registration District.	1884-85	836	86,308	4,293	114	4,461	N. 60,385 S. 59,224	33,665 32,918	2,022 1,944	P. 48,690 R. 1,146	47,282 598	96,072 1,744
										49,836	47,980	97,816
	1885-86	899	87,788	4,204	135	4,124	N. 64,094 S. 62,834	32,115 31,414	1,041 981	P. 49,309 R. 1,013	47,941 548	97,250 1,561
										50,322	48,489	98,811
Presidency Circle	1884-85	820	9,554	3,084	1,200	1,500	N. 13,886 S. 13,449	2,089 1,989	193 179	P. 7,937 R. 1,827	8,231 232	16,168 2,059
										9,764	8,463	18,227
	1885-86	980	9,393	3,279	1,313	1,556	N. 14,017 S. 13,547	2,316 2,246	148 138	P. 8,101 R. 712	8,420 76	16,521 788
										8,813	8,496	17,309
Central Registration District.	1884-85	689	129,137	7,664	123	17,588	N. 97,168 S. 93,736	55,989 54,189	2,014 1,843	P. 79,101 R. 3,907	76,100 1,562	155,201 5,469
										83,008	77,662	160,670
	1885-86	750	149,275	8,096	90	21,378	N. 121,878 S. 115,880	56,319 54,038	1,492 1,372	P. 91,672 R. 2,394	88,517 826	180,189 3,220
										94,066	89,343	183,409
Southern Registration District.	1884-85	1,602	113,402	11,833	7	7,669	N. 74,556 S. 70,924	53,925 50,879	5,372 4,622	P. 68,255 R. 3,952	65,598 1,082	133,853 5,034
										72,207	66,680	138,887
	1885-86	803	119,567	12,081	4	7,923	N. 89,260 S. 85,840	48,618 46,065	3,039 2,642	P. 71,579 R. 4,260	69,229 962	140,808 5,222
										75,839	70,191	146,030
Eastern Gujarát Registration District.	1884-85	100	105,004	10,144	523	8,024	N. 81,414 S. 79,008	39,468 38,066	2,915 2,720	P. 64,798 R. 2,019	58,997 291	123,795 2,310
										66,817	59,288	126,105
	1885-86	114	111,898	10,379	424	9,592	N. 88,472 S. 86,174	41,421 40,238	2,514 2,399	P. 68,766 R. 1,677	63,641 288	132,407 1,965
										70,443	63,929	134,372
Western Gujarát Circle.	1884-85	11	84,099	11,092	22	6,020	N. 61,734 S. 56,535	37,824 33,651	1,686 1,257	P. 51,619 R. 15,113	49,623 10,535	101,244 25,648
										66,732	60,160	126,892
	1885-86	15	85,575	11,095	21	6,558	N. 57,763 S. 52,864	36,044 32,486	1,057 817	P. 53,410 R. 11,067	51,454 7,455	104,864 18,522
										64,477	59,909	124,386
Sind Registration District.	1884-85	128	13,710	62,910	57	6,931	N. 64,445 S. 61,191	17,114 15,856	2,177 2,007	P. 46,013 R. 9,551	37,723 9,484	83,736 19,035
										55,564	47,207	102,771
	1885-86	181	14,796	65,703	47	7,719	N. 66,934 S. 64,786	19,799 19,604	1,713 1,619	P. 48,204 R. 8,264	40,242 10,380	88,446 18,644
										56,468	50,622	107,090
Baroda	1884-85	12	58,708	4,451	58	3,587	N. 56,647 S. 54,221	9,840 9,275	315 282	P. 35,310 R. 237	31,501 46	66,811 283
										35,547	31,547	67,094
	1885-86	11	53,371	4,846	68	4,784	N. 57,956 S. 55,017	9,830 9,051	533 477	P. 35,485 R. 1,403	32,554 667	68,019 2,070
										36,888	33,201	70,089

Results.				Excess of Operations over Persons.	Ratio per 100.																Excess of Operations over Persons.
					Persons primarily vaccinated.									Total Number of Persons operated on.			Results.				
					Caste.					Age.				Sex.							
Successful.	Unsuccessful.	Unknown.	Total.		Christians.	Hindus.	Mutalmans.	Pársis.	Other Castes.	Under 1 year.	Between 1 and 6 years.	All Other Ages.	Males.	Females.	Total.	Successful.	Unsuccessful.	Unknown.	Total.	
94,086 1,215	1,151 282	965 247	96,202 1,744	130 ..	0·87	89·90	4.47	0·12	4·64	62·85 61·05	35·04 34·26	2·11 2·02	50·68 65·71	49·32 34·29	100 100	97·93 69·87	1·05 16·17	1·01 14·16	100·14 100	0·14 ..
95,301	1,433	1,212	97,946	130	..	..	..	..	..	..	..	..	50·95	49·05	100	97·43	1·32	1·24	100·13	0·13
95,229 986	1,225 397	984 178	97,438 1,561	188 ..	0·92	90·27	4·43	0·14	4·24	65·91 64·61	33·02 32·30	1·07 1·01	50·70 64·89	49.30 35 11	100 100	97·92 63·17	1·07 25·43	1·01 11·40	100·19 100	0·19 ..
96,215	1,622	1,162	98,999	188	..	..	..	..	..	..	..	..	50·93	49·07	100	97·37	1·45	1·18	100·19	0·19
15,008 1,792	818 199	291 68	16,717 2,059	549 ..	5·13	59·09	19·08	7·42	9·28	85·89 83·18	12·92 12·25	1·19 1·11	49·09 88·73	50·91 11·27	100 100	96·54 87·03	1·66 9·67	1·80 3·30	103·40 100	3·40 ..
17,400	1,017	359	18,776	549	..	..	..	..	..	..	..	..	53·57	46·43	100	95·46	2·57	1·97	103·01	3·01
15,931 557	511 96	364 135	16,806 788	285 ..	5·93	56·85	19·85	7·95	9·42	84·84 83·00	14·26 13·59	0·90 0·84	49·03 90·36	50·97 9·64	100 100	96·43 70·89	1·37 12·18	2·20 17·13	101·73 100	1·73 ..
16,488	607	499	17,594	285	..	.	..	..	..	..	..	..	50·91	49·09	100	95·26	1·86	2·88	101·65	1·65
149,768 3,545	1,797 1,409	3 867 515	155,432 5,469	231 ..	0·44	83·21	4·94	0·08	11·33	62·61 60·40	36·08 34·91	1·31 1·19	50·97 71·44	49·03 28·56	100 100	96·59 64·82	1·01 25·76	2·40 9·42	100·14 100	0·14 ..
153,313	3,206	4,382	160,901	231	..	..	..	..	..	..	..	..	51·66	48·34	100	95·42	1·85	2·73	100·14	0·14
171,290 2,116	1,853 710	7,305 394	180,448 3,220	259 ..	0·42	82·84	4·83	0·05	11·86	67·64 64·31	31·53 29·99	0·83 0·76	50·88 74·35	49·12 25·65	100 100	95·06 65·71	0·89 22·05	4·05 12·24	100·14 100	0·14 ..
173,406	2,563	7,699	183,668	259	..	..	..	..	..	..	..	..	51·29	48·71	100	94·55	1·26	4·19	100·14	0·14
126,423 3,432	2,775 1,071	4,979 540	134,179 5,043	226 9	0·75	84·72	8·84	0·01	5·68	55·70 52·99	40·29 38·01	4·01 3·45	50·99 78·51	49·01 21·49	100 100	94·45 68·18	1·83 21·10	3·72 10·72	100·24 100·18	0·24 0·18
129,855	3,846	5,519	139,222	235	..	..	..	..	..	..	..	..	51·99	48·01	100	93·50	2·53	3·97	100·24	0·24
134,547 3,521	1,933 1,105	4,547 598	141,027 5,224	219 2	0·57	85·20	8·58	0·00	5·65	63·39 60·96	34·46 32·71	2·15 1·88	50·83 81·55	49·17 18·42	100 100	95·55 67·43	1·22 21·12	3·23 11·45	100·16 100·04	0·16 0·04
138,068	3,038	5,145	146,251	221	..	..	..	..	..	..	..	..	51·93	48·07	100	94·55	1·93	3·52	100·15	0·15
119,794 1,368	2,802 580	1,827 363	124,423 2,311	628 1	0·03	84·82	8·20	0·42	6·08	65·77 63·82	31·88 30·75	2·35 2·20	52·34 87·40	47·66 12·60	100 100	96·77 59·22	1·76 25·07	1·47 15·71	100·51 100·04	0·51 0·04
121,162	3,382	2,190	216,734	629	..	..	..	..	..	..	..	..	52·99	47·01	100	96·08	2·18	1·74	100·50	0·50
129,311 1,233	2,144 429	1,609 309	132,864 1,971	457 6	0·09	84·51	7·84	0·32	7·24	66·32 65·08	31·28 30·39	1·90 1·81	51·94 85·34	48·06 14·66	100 100	97·28 62·75	1·50 21·53	1·22 15·72	100·35 100·31	0·35 0·31
130,044	2,873	1,918	134,835	463	..	..	..	..	..	..	..	..	52·42	47·58	100	96·78	1·79	1·43	100·34	0·34
91,443 10,236	5,510 6,528	4,423 2 888	101,436 25,652	192 4	0·01	83·07	10·96	0·02	5·94	60·98 55·84	37·36 33·24	1·66 1·24	50·98 58·92	49·02 41·04	100 100	90·32 63·30	5·31 25·44	4·37 11·26	100·19 100·02	0·19 0·02
107,679	12,094	7,311	127,088	196	..	..	..	..	..	..	..	..	52·59	47·41	100	84·86	9·38	5·76	100·15	0·15
96,167 12,325	4,742 4,299	4,087 2,302	104,996 18,926	132 4	0·02	82·56	11·15	0·02	6·25	64·62 59·95	34·37 30·98	1·01 0·78	50·93 58·49	49·07 41·51	100 100	91·71 65·14	4·40 22·70	3·89 12·16	100·12 100·02	0·12 0·02
108,492	9,041	6,389	123,922	136	..	..	..	..	..	..	..	..	52·09	47·91	100	87·65	7·19	5·16	100·11	0·11
79,064 12,815	1,409 3,296	3,633 3,461	84,106 19,072	370 37	0·15	16·37	75·13	0·07	8·28	76·96 73·07	20·44 18·95	2·60 2·40	54·01 50·18	45·06 49·82	100 100	94·42 64·70	1·24 17·12	4·34 18·18	100·44 100·19	0·44 0·19
91,879	4,705	7,094	103,178	407	..	..	..	..	..	..	..	..	54·07	45·93	100	88·92	4·18	6·90	100·40	0·40
85,409 12,966	1,097 3,331	2,213 2,369	88,719 18,666	273 22	0·20	16·73	74·29	0·05	8·73	75·68 73·25	22·38 21·49	1·94 1·83	54·50 44·33	45·50 55·67	100 100	96·57 69·54	0·93 17·75	2·50 12·71	100·31 100·12	0·31 0·12
98,375	4,428	4,582	107,385	295	..	..	..	..	..	..	..	..	52·73	47·27	100	91·36	3·86	4·78	100·23	0·23
63,778 210	1,832 63	1,459 16	67,069 289	258 ..	0·02	87·86	6·66	0·09	5·37	84·79 81·16	14·74 13·88	0·47 0·42	52·85 83·75	47·15 16·25	100 100	95·46 74·20	2·86 22·26	2·18 3·54	100·38 100	0·38 ..
63,988	1,895	1,469	67,352	258	..	..	..	..	..	..	..	..	52·98	47·02	100	95·37	2·44	2·19	100·38	0·38
65,445 1,738	1,432 222	1,327 112	68,204 2,072	185 2	0·02	85·82	7·12	0·09	6·95	85·21 82·21	14·01 13·31	0·78 0·70	52.17 67·78	47·83 32·22	100 100	96·22 83·96	1·83 10·63	1·95 5·41	100·27 100·10	0·27 0·10
67,183	1,654	1,439	70,276	187	..	..	..	..	..	..	..	..	52·63	47·37	100	95·86	2·09	2·05	100·27	0·27

Districts and Circles.	Years.	Persons primarily vaccinated. Caste. Christians.	Hindus.	Musalmáns.	Pársis.	Other Castes.	Age. N—Number. S—Successful. Under 1 year.	Between 1 and 6 years.	All other Ages.	Total Number of Persons operated on. P.—Primary Vaccinations. R.—Re-vaccinations. Sex. Males.	Females.	Total.
Cutch	1884-85	7	15,175	5,301	2	1	N. 12,324	7,078	1,684	P. 10,555	9,931	20,486
							S. 12,238	7,007	1,670	R. 153	35	188
										10,708	9,966	20,674
	1885-86	2	15,785	5,130	2	..	N. 14,410	6,140	369	P. 10,873	10,046	20,919
							S. 14,295	6,064	351	R. 168	28	196
										11,041	10,074	21,115
Aden, Muskat, Khelat and Bushire.	1884-85	..	41	856	5	57	N. 297	499	221	P. 642	317	959
							S. 202	400	136	R. 6	3	9
										648	320	968
	1885-86	13	118	1,437	3	67	N. 655	710	273	P. 997	641	1,638
							S. 611	655	241	R. 9	3	12
										1,006	644	1,650
British Army ..	1884-85	145	153	13	2	15	N. 277	29	22	P. 171	157	328
							S. 256	29	20	R. 135	12	147
										306	169	475
	1885-86	145	57	4	..	..	N. 181	9	16	P. 118	88	206
							S. 165	9	14	R. 112	10	122
										230	98	328
Native Army ..	1884-85	59	1,931	1,122	11	431	N. 2,832	409	313	P. 1,921	1,633	3,554
							S. 2,601	300	220	R. 1,153	282	1,435
										3,074	1,915	4,989
	1885-86	61	1,630	988	33	408	N. 2,274	466	330	P. 1,948	1,172	3,120
							S. 2,158	437	306	R. 631	50	681
										2,579	1,222	3,801
Total for the Bombay Presidency.	1884-85	3,819	617,277	122,763	2,124	56,224	N. 526,905	257,038	18,364	P. 415,012	387,195	802,207
							S. 503,585	244,560	16,300	R. 39,199	24,162	63,361
										454,211	411,357	864,568
	1885-86	3,974	655,653	128,541	2,130	64,089	N. 587,894	253,927	12,566	P. 440,462	413,925	854,387
							S. 555,071	241,707	11,357	R. 31,710	21,693	53,403
										472,172	435,618	907,790

Particulars of vaccine operations by caste, age, sex and result, with their percentages according to Districts and Circles.

12. The above table specifies, by districts and circles, caste, age, sex and result in primary vaccinations, and sex and result in re-vaccinations and total operations as contrasted with those in 1884-85. It will be observed that there is an improvement in the infantile vaccinations over that of last year as regards numbers as well as percentages.

Caste.

13. During the year there were primarily vaccinated 3,974 Christians, 655,653 Hindus, 128,541 Musalmáns, 2,130 Pársis, and 64,089 persons of Other Castes, and for all classes the numbers are higher than last year, whilst the respective percentages are lower except that for persons of Other Castes, being 0·47, 76·74, 15·05, 0·24 and 7·50. As regards each district and circle, Christians have a higher percentage in all, except the Central, Southern and Cutch. The percentages for Hindus are lower in the Presidency Circle, Central, Eastern Gujarát, Western Gujarát, Baroda and the British and Native Army; and for Musalmáns they are lower in all the districts and circles except the Presidency Circle, Western Gujarát, Baroda and Native Army. Pársis have a higher percentage in the Western, Presidency Circle and Native Army. The percentages for Other Castes are higher in the Presidency Circle, Central, Eastern Gujarát, Western Gujarát, Sind, Baroda and Native Army.

Results.				Excess of Operations over Persons.	Ratio per 1,000.																			Excess of Operations over Persons.
					Persons primarily vaccinated.									Total Number of Persons operated on.			Results.							
					Caste.					Age.				Sex.										
Successful.	Unsuccessful.	Unknown.	Total.		Christians.	Hindus.	Musalmans.	Pársis.	Other Castes.	Under 1 year.	Between 1 and 6 years.	All other Ages.	Males.	Females.	Total.	Successful.	Unsuccessful.	Unknown.	Total.					
2,9315 170	279 31	73 ..	20,667 201	181 13	0·08	74·08	25·83	0·01	..	60·16 59·74	34·55 34·21	5·29 5·22	51·52 81·38	48·48 18·62	100 100	99·17 90·43	0·48 9·57	0·35 ..	100·38 100·70	0·68 0·70				
20,485	310	73	20,868	194	..	..	..	..	..	..	..	..	51·79	48·21	100	99·09	0·56	0·35	100·94	0·94				
20,719 140	353 60	47 1	21,119 201	191 5	0·01	75·46	24·52	0·01	..	68·29 68·33	29·35 23·99	1·76 1·68	51·98 85·71	48·02 14·29	100 100	99·00 71·43	0·77 28·06	0·23 0·51	100·91 102·55	0·91 2·55				
20,859	413	48	21,311	196	..	..	..	..	..	..	..	..	52·29	47·71	100	98·74	1·03	0·23	100·93	0·93				
738 4	128 5	99 ..	969 9	1 ..	..	4·28	89·26	0·52	5·94	24·71 21·06	52·03 41·71	22·26 14·18	66·94 66·67	33·06 33·33	100 100	76·95 44·44	12·72 55·56	10·33 ..	100·10 100·	0·10 ..				
742	128	99	969	1	..	..	..	..	..	..	..	..	60·94	33·06	100	76·65	13·12	10·23	100·10	0·10				
1,507 12	98 ..	34 ..	1,639 12	1 ..	0·79	7·21	87·73	0·18	4·09	39·99 37·50	43·35 39·99	16·66 14·71	60·87 75·00	39·13 25·00	100 100	92·00 100·	5·92 ..	2·08 ..	100·66 100·	0·06 ..				
1,519	98	34	1,651	1	..	..	..	..	..	..	..	..	60·97	39·03	100	92·06	5·88	2·06	100·06	0·06				
305 114	22 32	1 1	328 147	.. ..	44·21	46·65	3·98	0·61	4·57	84·45 78·05	8·84 8·84	6·71 6·10	52·13 91·84	47·87 8·16	100 100	92·99 77·55	6·71 21·77	0·30 0·68	100· 100·	.. ..				
419	54	2	475	..	..	..	..	..	..	..	..	..	64·42	35·58	100	88·21	11·37	0·42	100·	..				
188 97	11 30	7 ..	206 127	.. 5	70·39	27·67	1·94	..	..	87·86 80·10	4·37 4·37	7·77 5·79	57·28 91·80	42·72 8·20	100 100	91·26 79·51	5·34 20·49	3·40 ..	100· 104·10	.. 4·10				
285	41	7	333	5	..	..	..	..	..	..	..	..	70·12	29·88	100	85·89	10·98	2·13	101·52	1·52				
3,121 854	370 570	65 11	3,556 1,435	2 ..	1·66	54·33	31·57	0·31	12·13	79·69 73·19	11·51 3·44	8·80 6·12	54·05 80·35	45·95 19·65	100 100	87·82 59·51	10·85 39·72	1·33 0·77	100·06 100·	0·06 ..				
3,975	940	76	4,991	2	..	..	..	..	..	..	..	..	61·62	38·38	100	79·68	18·80	1·52	100·04	0·04				
2,901 500	192 174	30 7	3,123 681	3 ..	1·96	52·34	31·66	1·06	13·08	72·88 69·17	14·94 14·00	12·18 9·81	62·44 92·66	37·56 7·34	100 100	92·98 73·43	6·06 25·55	0·96 1·03	100·10 100·	0·10 ..				
3,401	366	37	3,804	3	..	..	..	..	..	..	..	..	67·85	32·15	100	89·48	9·55	0·97	100·08	0·08				
764,445 41,255	18,948 14,066	21,682 8,104	805,075 63,425	2,868 64	0·48	76·95	15·30	0·26	7·01	65·56 62·77	32·15 30·49	2·29 2·03	51·73 61·37	48·27 38·13	100 100	95·29 65·11	2·01 22·10	2·70 12·79	100·36 100·10	0·36 0·10				
805,700	33,014	29,786	868,500	2,932	..	..	..	..	..	..	..	..	52·48	47·52	100	93·08	3·48	3·14	100·34	0·34				
818,135 36,191	15,891 10,853	22,554 6,405	856,580 53,449	2,193 46	0·47	76·74	15·05	0·24	7·49	68·31	29·72 1·28	1·47 1·31	51·55 vaccinated	48·45 for	100 100	95·76 67·77	1·60 20·24	2·64 11·99	100·26 100·09	0·26 0·09				
854,326	26,744	28,959	910,029	2,239	..	..	..	..	..	..	..	..	52·01	47·99	100	[illegible]	[illegible]	3·10	100·25	0·25				

Districts ... tions per ... tion.

14. The age details are compiled for three periods, *viz.* under 1 year, between 1 and 6 years, and above 6 years. The numbers under each period primarily vaccinated were respectively 587,894, 253,927, and 12,566 against 525,905, 257,938 and 18,364 during the preceding year. The number of infants successfully vaccinated was 565,071, of children between 1 and 6 years 241,707, and of persons of other ages 11,357. Thus out of every 100 persons primarily vaccinated, there were 68·81 infants, of whom 66·14 were successfully vaccinated. Compared with the preceding year, this rate is higher by 3·37 per cent.; the difference between the numbers vaccinated and the successful cases being only 0·12 per cent. less than last year.

Age.

15. At the rate of 31 per mille of population and on the total population of 25,615,528, there were successfully vaccinated 71·16 out of every 100 infants against 63·41 in 1884-85, 61·00 in 1883-84, 59·01 in 1882-83, 58·35 in 1881-82, 49·27 in 1880-81, and 39·78 in 1879-80. Thus every year is characterised by progress in the protection afforded to infants. The subjoined table shows the number of infants protected out of those available for vaccination (at the rate of 31 per mille of population) :—

Infants successfully vaccinated as compared with those available for vaccination by Districts and Circles at the rate of 31 per mille of population.

by districts and circles, as likewise the protection of children between one and six years old:—

Districts and Circles.	Population.	Children under 1 year available for Vaccination at 31 per 1,000.	Years.	Children under 1 year vaccinated successfully.		Children between 1 and 6 years vaccinated successfully.	
				Number.	Ratio per 100 on Infants.	Number.	Ratio per 100 on Total Vaccinated.
1. Cutch	512,084	15,874	1884-85	12,238	77·10	7,007	34·21
			1885-86	14,295	90·05	6,064	28·99
2. Baroda	2,185,005	67,735	1884-85	54,221	80·05	9,725	13·88
			1885-86	55,917	82·55	9,051	13·31
3. Sind	2,542,976	78,832	1884-85	61,191	77·62	15,866	18·95
			1885-86	64,786	82·18	19,004	21·49
4. Central	4,858,709	150,620	1884-85	93,736	62·23	54,189	34·91
			1885-86	115,880	76·94	54,038	29·99
5. Western Gujarát ...	2,920,377	90,532	1884-85	56,535	62·45	33,651	33·24
			1885-86	62,864	69·44	32,486	30·98
6. Southern	4,132,186	128,098	1884-85	70,924	55·37	50,879	38·01
			1885-86	85,840	67·01	46,065	32·71
7. Eastern Gujarát ...	4,162,314	129,032	1884-85	79,008	61·23	38,066	30·75
			1885-86	86,174	66·78	40,238	30·39
8. Western	3,493,821	108,308	1884-85	59,224	54·68	32,918	34·26
			1885-86	62,834	58·01	31,414	32·30
9. Presidency Circle ...	773,196	23,969	1884-85	13,449	56·11	1,980	12·25
			1885-86	13,547	56·52	2,246	13·59
10. Aden, Muskat, Khelat and Bushire ...	*34,860	1,081	1884-85	202	18·69	400	41·71
			1885-86	611	56·52	655	39·99
11. Native Army ...	.....	...	1884-85	2,601	...	300	8·44
			1885-86	2,158	...	437	14·00
12. British Army ...	.....	...	1884-85	256	...	29	8·84
			1885-86	165	...	9	4·37
Total ...	25,615,528	794,081	1884-85	503,585	63·41	244,560	30·49
			1885-86	565,071	71·16	241,707	28·29

* Of Aden only.

The Southern has risen from the 8th to the 6th place, Western from the 9th to the 8th, and the Central from the 5th to the 4th place. Cutch stands first, having a percentage of 90·05 infants protected instead of 77·10 last year. There is a rise in the percentages of infants protected in all the districts and circles. The highest rise is observed in Aden, Muskat, Khelat and Bushire to the extent of 37·83 per cent.

Sex.

16. There were 440,462 males and 413,925 females primarily vaccinated. The re-vaccinated were respectively 31,710 and 21,693 and the totals of persons operated on were 472,172 males and 435,618 females. In primary vaccinations the sex percentages are respectively 51·55 and 48·45 against 51·73 and 48·27 last year; in re-vaccinations they are 59·38 and 40·62 against 61·87 and 38·13; and in total operations they are 52·01 and 47·99 against 52·48 and 47·52.

Results.

17. There is a rise in the percentage of "successful" cases. In primary vaccinations there were 818,135, or 95·76 per cent., successful; 15,891, or 1·60 per cent., unsuccessful; and 22,554, or 2·64 per cent., unknown. Secondary operations amounted to 2,193 or 0·26 per cent. The percentages for 1884-85 were respectively 95·29, 2·01 2·70 and 0·36.

There is a rise in successful re-vaccinations to the extent of 2·66 per cent. The three kinds of result afforded the respective percentages of 67·77, 20·24 and 11·99 against 65·11, 22·10 and 12·79 in the previous year. In 46 cases, or 0·10 per cent., the re-vaccinations were repeated; last year they were repeated in 64 instances.

Of total operations 854,326, or 94·11 per cent., were successful; 26,744, or 2·70 per cent., were unsuccessful; and 28,959 or 3·19 were unknown. Last

year the percentages were respectively 93·08, 3·48 and 3·44. The excess of operations over persons was 2,239, or 0·25 per 100 against 2,932, or 0·34 per cent., in 1884-85. In calculating the percentages of unsuccessful cases these numbers have been excluded.

Percentages of success reviewed by Districts and Circles.

18. The following table shows by districts and circles the percentages of success in primary vaccinations and re-vaccinations contrasted with those for the previous years :—

No.	Districts and Circles.	Percentages of Success in Primary Vaccinations.		Percentages of Success in Re-vaccinations.	
		1884-85.	1885-86.	1884-85.	1885-86.
1	Cutch Circle	99·17	99·00	90·43	71·43
2	Western Registration District	97·93	97·92	69·67	63·16
3	Eastern Gujarát Registration District ...	96·77	97·28	59·22	62·75
4	Sind Registration District	94·42	96·57	64·70	69·54
5	Presidency Circle	96·54	96·43	87·03	70·69
6	Baroda Circle	95·46	96·22	74·20	83·96
7	Southern Registration District	94·45	95·55	68·18	67·43
8	Central Registration District...	96·50	95·06	64·82	65·71
9	Native Army	87·82	92·98	59·51	73·42
10	Aden, &c.	76·95	92·00	44·44	100·
11	Western Gujarát Circle	90·32	91·71	63·30	65·14
12	British Army	92·99	91·26	77·55	79·51
	Average for the whole Presidency ...	95·29	95·76	65·11	67·77

In the "successful" primary vaccinations the percentages are lower than last year in five out of twelve districts and circles. In Eastern Gujarát, Sind, Baroda, Southern, Native Army, Aden, &c., and Western Guiarát Circle they are higher owing to there being fewer "unsuccessful" and "unknown" cases than last year. On the whole there has been an increase in the number and percentage of successful cases over those of last year.

Rate per mille of population protected by primary vaccinations by Districts and Circles.

19. The number of persons primarily vaccinated successfully out of every 1,000 population by districts and circles, as compared with 1884-85, is shown in the table below :—

No.	Districts and Circles.	Population of Registration Districts and Circles according to the Census of 1881.	Total Number of Persons primarily vaccinated successfully.		Number of Primary successful Vaccinations per 1,000 of Population.	
			1884-85.	1885-86.	1884-85.	1885-86.
1	Aden, Muskat, Khelat and Bushire ...	34,860	738	1,507	21·02	43·23
2	Cutch	512,084	20,315	20,710	39·67	40·44
3	Central Registration District	4,858,709	149,768	171,290	30·82	35·25
4	Sind Registration District	2,542,976	79,064	85,409	31·09	33·59
5	Western Gujarát Circle	2,920,377	91,443	96,167	31·31	32·93
6	Southern Registration District... ...	4,132,186	126,425	134,547	30·60	32·56
7	Eastern Gujarát Registration District...	4,162,314	119,794	128,811	28·78	30·95
8	Baroda	2,185,005	63,778	65,445	29·19	29·95
9	Western Registration District	3,493,821	94,086	95,229	26·93	27·26
10	Presidency Circle...	773,196	15,608	15,931	20·19	20·60
11	British Army	.....	305	188	...	...
12	Native Army	.....	3,121	2,901	...	...
	Total ...	25,615,528	764,445	818,135	29·84	31·94
	In British Territory	16,503,663	497,482	527,126	30·14	31·94
	In Native States	9,111,865	266,963	291,009	29·30	31·94

The rate of protection is higher than last year in all the districts and circles. It is lowest in Western Registration District and Presidency Circle. In British and Native territory it is respectively 31·94 against 30·14 and 29·30 per mille of popula-

tion in the previous year. On the whole, 31·94 persons of all ages per every 1,000 of population against 29·84 last year, 30·89 in 1883-84, 29·74 in 1882-83, 27·54 in 1881-82, and 24·60 in 1880-81 were primarily vaccinated successfully.

Vaccinations by Establishments.

20. The progress of vaccination by different establishments will be seen from the subjoined table :—

Establishments.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.
2 Government Vaccinators	4,397	4,947	550 12·51	..	252	430	178 70·63	..	4,649	5,377	728 15·66	..
45 Municipal	56,895	58,089	1,188 2·09	..	6,998	5,392	..	1,606 22·95	63,893	63,475	..	418 0·65
1 Cantonment ..	1,485	1,518	33 2·22	..	309	307	..	2 0·65	1,794	1,826	31 1·73	..
263 Local Fund.. ..	441,340	471,789	30,449 6·90	..	23,159	21,945	..	1,214 5·24	464,499	493,734	29,235 6·29	..
160 Native States ..	270,194	294,426	24,232 8·97	..	29,281	23,765	..	5,516 18·84	299,475	318,191	18,716 6·25	..
145 Dispensaries ..	24,014	20,298	...	3,716 15·47	1,780	761	..	1,019 57·22	25,794	21,059	..	4,735 18·36
British Army	328	200	..	128 37·20	147	122	..	25 17·01	475	322	..	147 30·95
Native Army	3,554	3,120	..	434 12·21	1,435	681	..	754 52·54	4,989	3,801	..	1,188 23·81
Total ..	802,207	854,837	56,452 7·04	4,272 0·53	63,361	53,403	178 0·28	10,136 16·00	865,568	907,790	48,710 5·63	6,488 0·75

In primary vaccinations an increase is observed under all, except dispensaries and the army, amounting to 56,452, or 7·04 per cent., the maximum rate of increase being 12·51 per cent. under Government. The decrease amounts to 4,272, or 0·53 per cent. In re-vaccinations there is a decrease of 10,136, or 16·00 per cent. under all, except the Government establishment, which amounts to 178, or 0·28 per cent. in the whole. Taking the two kinds of operations together, there is an increase of 48,710, or 5·63 per cent., and a decrease of 6,488, or 0·75 per cent., in the work of the Municipal vaccinators and in the dispensaries and the army generally.

Results in Vaccine Operations by Establishments.

21. The results in primary vaccinations, re-vaccinations, and total operations, as analysed by establishments, are as under :—

Establishments.	Year.	Results in Primary Vaccinations.					Results in Re-vaccinations.					Results in Total Operations.				
		Successful.	Unsuccessful.	Unknown.	Total.	Excess of Operations.	Successful.	Unsuccessful.	Unknown.	Total.	Excess of Operations.	Successful.	Unsuccessful.	Unknown.	Total.	Excess of Operations.
2 Government Vaccinators.	1884-85	4,249	50	107	4,406	9	226	22	5	253	1	4,475	72	112	4,659	10
	1885-86	4,545	167	253	4,965	18	381	37	14	432	2	4,926	204	267	5,397	20
45 Municipal	1884-85	54,582	1,554	1,382	57,518	653	4,867	979	1,157	7,003	5	59,449	2,533	2,539	64,521	658
Vaccinators.	1885-86	55,631	1,129	1,676	58,436	353	3,604	940	851	5,395	3	59,235	2,069	2,527	63,831	356
1 Cantonment Vaccinator.	1884-85	1,472	3	10	1,485	..	173	117	19	309	..	1,645	120	29	1,794	..
	1885-86	1,442	31	55	1,528	10	156	108	43	307	..	1,598	139	98	1,835	10
263 Local Fund Vaccinators.	1884-85	425,148	6,158	11,174	442,480	1,140	15,229	4,366	3,605	23,200	41	440,377	10,524	14,779	465,680	1,181
	1885-86	454,756	5,549	12,436	472,741	952	15,333	4,043	2,593	21,969	24	470,089	9,592	15,029	494,710	976
160 Native States Vaccinators.	1884-85	253,942	9,285	7,954	271,181	987	18,633	7,421	3,244	29,298	17	272,575	16,706	11,198	300,479	1,004
	1885-86	279,746	7,984	7,500	295,230	804	15,696	5,299	2,782	23,777	12	295,442	13,283	10,282	319,007	816
145 Dispensaries.	1884-85	21,628	1,476	989	24,091	77	1,159	559	62	1,780	..	22,785	2,035	1,051	25,871	77
	1885-86	18,926	823	507	20,351	53	424	222	115	761	..	19,350	1,050	712	21,112	53
British Army	1884-85	305	22	1	328	..	114	32	1	147	..	419	54	2	475	..
	1885-86	188	11	7	206	..	97	30	..	127	5	285	41	7	333	5
Native Army	1884-85	3,121	370	65	3,556	2	854	570	11	1,435	..	3,975	940	76	4,991	2
	1885-86	2,901	192	30	3,123	3	500	174	7	681	..	3,401	366	37	3,804	3
Total for the Bombay Presidency.	1884-85	764,445	18,948	21,682	805,075	2,868	41,255	14,066	8,104	63,425	64	805,700	33,014	29,786	866,500	2,932
	1885-86	818,136	15,891	22,564	856,680	2,193	36,191	10,853	6,405	53,449	46	854,326	26,744	28,959	910,029	2,239

In primary vaccinations the number of successful cases was more than last year for each establishment, except the Cantonment, Dispensaries and the Army, owing to the smaller number of unsuccessful cases. The unknown cases outnumber the unsuccessful in Government, Municipal, Cantonment and Local

Fund establishments and are more than last year in Native State establishment, Dispensaries and the Native Army.

In re-vaccinations the successful cases are less than last year in all except under Government and Local Fund establishments, owing to the lesser number of re-vaccinations. The intensity of the protective power of primary vaccine operations may be judged by the unsuccessful re-vaccinations. The unsuccessful and unknown cases are less than in 1884-85 on the whole, and also in Municipalities, Local Funds, Native States, Dispensaries and the Army generally.

Percentages of success reviewed by Establishments.

22. The percentages of successful cases in each kind of operation by establishments are given below:—

Establishments.		Government.	Municipal.	Cantonment.	Local Fund.	Native States.	Dispensaries.	British Army.	Native Army.	For the whole Presidency.
In Primary Vaccinations.										
Percentage of success ...	1884-85 ...	96·63	95·93	99·12	96·33	93·99	90·06	92·99	87·82	95·29
	1885-86 ...	91·88	95·78	94·99	96·39	95·01	93·24	91·26	92·98	95·76
In Re-vaccinations.										
Percentage of success ...	1884-85 ...	89·68	69·55	55·99	65·76	63·64	65·11	77·55	59·51	65·11
	1885-86 ...	88·60	66·84	50·81	69·87	66·05	55·72	79·51	73·42	67·77

In primary vaccinations the percentages are higher than in the preceding year in Local Fund and Native State establishments and in Dispensaries and Native Army. The highest percentage is 96·39 under Local Fund and the lowest is 91·26 in the British Army. The next highest is 95·78 in Municipal and the next lowest is 91·88 under Government. In re-vaccinations the lowest percentage is 50·81 in Cantonment and the highest is 88·60 under Government.

Work of Establishments by Districts and Circles.

23. The work of the different establishments by districts and circles is as follows:—

Work of Government Vaccinators.

24. There are 2 vaccinators for the cantonments of Rájkot and Deesa, paid from Provincial Funds, who work under the Superintendent of Vaccination, Western Gujarát Circle. Half the cost of vaccination in Deesa is borne by the Cantonment Committee. Besides these 2, there are 3 others under the Station Staff Surgeons for the military stations of Mhow, Neemuch and Nasirabad, paid from "Military Funds." Their work is included under the head of Native Army and Camp Followers. The Rájkot and Deesa vaccinators work among a population of 126,019 souls in an area of 1,135 square miles. There were 4,947 persons primarily vaccinated and 430 re-vaccinated, against 4,397 and 252 in the previous year. The successful cases were, respectively, 4,545 and 381, or 91·88 and 88·60 per cent.: so, taking the two operations together, 39·09 per thousand of population were protected against 35·51 last year. The total cost was Rs. 491-15. The cost of each successful case was anna 1 and pies 7, or 1 pie less than last year. In primary vaccinations the unsuccessful cases were 167 and of unknown 253. In re-vaccinations the unsuccessful and the unknown were 37 and 14. Secondary operations, after the failure of the first, were performed on 18 persons and in 2 cases the re-vaccination was repeated. Each vaccinator averaged 2,688 persons.

Work of Cantonment Vaccinators.

25. There is only one vaccinator for the Cantonments of Poona and Kirkee, which cover an area of 8·78 square miles and contain a population of 37,381 persons. His work is supervised by the Deputy Sanitary Commissioner, Central Registration District. A special vaccinator entertained in December 1884 for the trooping season only in the Cantonment of Devláli on a salary of Rs. 13 with contingencies of annas 8 per month was reduced in May 1885, and vaccinations in that Cantonment are throughout the year now carried on by the Medical Officer in charge of the Lock Hospital without additional

charges. Taking the work in the three cantonments together, there were 1,518 persons primarily vaccinated and 307 re-vaccinated against 1,485 and 309 in the year 1884-85. In primary vaccinations, 1,442, or 94·99 per cent., were successful, and in re-vaccination 156, or 50·81 per cent., were successful. The rate of protection per mille of population was 39·60. Last year it was 40·77. The total cost was Rs. 628, annas 8 and pies 6, or annas 6 and pies 4 for each successful case; last year it was annas 6-6. There were 31 unsuccessful and 55 unknown cases under primary vaccinations, and among re-vaccinations they were respectively 108 and 43. None were operated on more than once.

Work of Municipal Vaccinators.

26. The following table gives the progress of vaccination by districts and circles under municipal vaccinators:—

Districts and Circles.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.
Western Registration District.	3,337	3,353	16	...	269	368	99	...	3,606	3,721	115	...
Presidency Circle	16,168	16,521	353	...	1,874	672	...	1,202	18,042	17,193	...	849
Central Registration District ..	10,934	11,121	187	...	1,167	663	...	504	12,101	11,784	...	317
Southern Registration District.	7,246	7,925	679	...	427	400	...	27	7,673	8,325	652	..
Eastern Gujarát Registration District	10,643	10,119	...	524	237	333	96	...	10,880	10,452	...	428
Sind Registration District ...	8,156	8,434	278	...	3,023	2,956	...	67	11,179	11,390	211	..
Aden	411	610	199	..	1	...	...	1	412	610	198	...
Total ...	56,895	58,083	1,712	524	6,998	5,392	195	1,801	63,893	63,475	1,176	1,594

In primary vaccinations an increase of 1,712 is observed in all the districts, except the Eastern Gujarát, where the decrease amounts to 524. In re-vaccinations there is an increase of only 195 in the Western and Eastern Gujarát Registration Districts; this increase is small when compared with the very large decrease of 1,801 in other districts, which in the Presidency Circle alone amounted to 1,202. On the whole, taking the two operations together, there is a net increase of 418. The Vengúrla and Athni Municipalities have each entertained the services of a special vaccinator. There are in all 45 vaccinators, or 3 more than last year, who worked amongst a population of 1,841,220 over an area of 116·12 square miles. They returned 58,083 primary vaccinations and 5,392 re-vaccinations, of which there were, respectively, 55,631 or 95·78, and 3,604 or 66·84 per cent. successful. The percentage of success attained is equal to 32·17 per mille of population against 32·76 last year. The total cost was Rs. 27,350 and annas 7, equal to annas 7 and pies 5, or 10 pies more than in the preceding year, per each successful case. The unsuccessful and unknown were, respectively, 1,129 and 1,676 and 940 and 851 under each kind of operation. There were 353 secondary operations, and in 3 cases the re-vaccinations were repeated. Each vaccinator, on an average, operated on 1,411 persons. Vaccination is carried on by the dispensary medical officers in those towns where there are no vaccinators, and the rural vaccinator performs the work where there is no dispensary. Government have in their Resolutions Nos. 3033, 4010 and 1,645 dated the 12th April 1885, 22nd October 1885 and 7th May 1886, sufficiently disposed of the subject of the entertainment of special vaccinators in towns having a population of 10,000, and it is hoped that the several municipal boards will now find their way to make provision for the same.

Necessity for Special Vaccinators in Towns having a population of 10,000.

Districts.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.
Western Registration District	84,649	84,679	30	..	1,317	1,071	..	246	85,966	85,750	..	216
Central Registration District	127,135	146,568	19,433	..	1,499	1,250	..	249	128,634	147,818	19,184	..
Southern Registration District	80,949	85,423	4,474	..	2,922	2,959	37	..	83,871	88,382	4,511	..
Eastern Gujarát Registration District ..	78,037	80,739	2,702	..	1,777	1,347	..	430	79,814	82,086	2,272	..
Sind Registration District	70,570	74,380	3,810	..	15,644	15,318	..	326	86,214	89,698	3,484	..
Total ..	441,340	471,789	30,449	..	23,159	21,945	37	1,251	464,499	493,734	29,451	216

Work of Local Fund Vaccinators.

27. The above table shows the work of Local Fund vaccinators for each of the five registration districts. There is an increase in primary vaccinations in all the districts to the extent of 30,449. In re-vaccinations there is a decrease of 1,251. This year there were 268 vaccinators against 255 in the previous year, as 13 additional vaccinators, 4 in each of the Collectorates of Sátára and Belgaum, 2 in each of the Collectorates of Dhárwár and Kaira, and 1 in the Collectorate of Kolába were employed during the year. There are now only 4 vaccinators (1 in Broach and 3 in Karáchi) who have more than one rural circle to attend to. The Local Fund vaccinators worked over an area of 124,194 square miles and amongst a population of 14,629,865. They primarily vaccinated 471,789 and re-vaccinated 21,945 persons. The number primarily vaccinated successfully was 454,756, or 96·39 per cent., and those re-vaccinated successfully were 15,333, or 69·87 per cent. The rate of protection per mille of population was 32·13 against 29·92 last year. The total cost amounted to Rs. 83,025-10. Each successful case cost annas 2 and pies 10, or 2 pies less than last year. The unsuccessful in each kind of operations were, respectively, 5,549 and 4,043 and the unknown were 12,436 and 2,593. There were 952 secondary operations and 24 repetitions of re-vaccinations. Each vaccinator, on the average, operated on 1,842 persons.

Districts and Circles.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.
Western Registration District..	3,178	3,984	806	..	38	1	..	37	3,216	3,985	769	..
Central Registration District..	12,053	17,835	5,782	..	2,452	967	..	1,485	14,505	18,802	4,297	..
Southern Registration District.	39,575	43,196	3,621	..	1,125	1,770	645	..	40,700	44,966	4,266	..
Eastern Gujarát Registration District.	32,274	39,258	6,984	..	209	245	36	..	32,483	39,503	7,020	..
Western Gujarát Circle ..	94,390	98,020	3,630	..	24,898	18,373	..	6,525	119,288	116,393	..	2,895
Sind Registration District ..	3,433	4,588	1,155	..	84	133	49	..	3,517	4,721	1,204	..
Baroda	64,547	65,991	1,444	..	283	2,068	1,785	..	64,830	68,059	3,229	..
Cutch	20,486	20,919	433	..	188	196	8	..	20,674	21,115	441	..
Khelát	258	635	377	..	4	12	8	..	262	647	385	..
Total ..	270,194	294,426	24,232	..	29,281	23,765	2,531	8,047	299,475	318,191	21,611	2,895

Work of Native State Vaccinators.

28. The above table shows the work of Native State vaccinators in 5 districts and 3 circles. There is a general increase in primary vaccinations amounting to 24,232. In re-vaccinations there is a decrease of 8,047 in the Western, Central Registration District and in Western Gujarát. This decrease is higher than the increase, which amounts to 2,531. There is an increase of 21,611 in total operations in all except Western Gujarát, in which the decrease amounts to 2,895. There were 160 vaccinators, or 8 more than last year. The States of Mahi Kántha have now 8 vaccinators instead of 5, and the States of Janjira, Pant Sáchiv, Sávantvádi, Kolhápur

and Shirhatti have each entertained the services of an additional vaccinator during the year. They worked over an area of 79,705 square miles and amongst a population of 8,978,074. The numbers primarily vaccinated were 294,426, and 23,765 were re-vaccinated. Of these 279,746 and 15,696 respectively, or 95·01 and 66·05 per cent., were successful. The unsuccessful and unknown in primary vaccinations were 7,984 and 7,500 and 5,299 and 2,782 in re-vaccinations. There were 804 secondary operations, and 12 repetitions of re-vaccinations. Out of every 1,000 of population, 32·91 were successfully operated on against 30·57 last year. The total cost amounted to Rs. 55,554-5-6. This gives annas 3 per each successful case, or 3 pies less than last year. The average number of persons operated on by each vaccinator was 1,989. Additional vaccinators are required for each of the States of Gad Hinglaj, Panhála, Lúnáváda, Sunth, Kadána, Pálanpur (2), and Khairpur.

States that require additional Vaccinators.

29. There were 145 dispensaries, or 15 less than in the preceding year, in which vaccination was carried on. The following table shows the progress of vaccination in dispensaries by each district and circle:—

Work of Dispensary Officers.

Districts and Circles.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.	1884-85.	1885-86.	Increase.	Decrease.
Western Registration District ..	4,861	5,147	286	..	120	121	1	..	4,981	5,268	287	..
Presidency Circle	..	..	..	..	185	116	..	69	185	116	..	69
Central Registration District ..	3,641	3,234	..	407	42	33	..	9	3,683	3,267	..	416
Southern Registration District ..	6,088	4,264	..	1,819	560	93	..	467	6,648	4,357	..	2,286
Eastern Gujarát Registration District.	2,841	2,291	..	550	87	40	..	47	2,928	2,331	..	597
Western Gujarát Circle	2,457	1,897	..	560	498	119	..	379	2,955	2,016	..	939
Sind Registration District ..	1,577	1,044	..	533	284	237	..	47	1,861	1,281	..	580
Baroda	2,264	2,028	..	236	..	2	2	..	2,264	2,030	..	234
Shaikh Othman, Bushire, and Muskat.	290	393	103	..	4	..	..	4	294	393	99	..
Total ..	24,014	20,298	389	4,105	1,780	761	3	1,022	25,794	21,059	386	5,121

A decrease amounting to 4,105 is observed in all the districts, but the Western, Shaikh Othman, Bushire and Muskat, in primary vaccinations. The decrease in the Central is owing to a falling off in the work done in all the dispensaries except those at Nevása, Indápur, Jejuri, Mhasvad, Tásgaón, Vengúrla and Sávantvádi. In the Southern the decrease occurred in almost all the dispensaries, whilst the vaccination work in the Kolhápur State dispensaries is now being carried on by the State vaccinators. In Eastern Gujarát it is attributable also to the same cause in the Collectorates of Kaira and Ahmedabad. In Western Gujarát the decrease is owing to there having been no vaccinations during the year at the dispensaries at Limbdi, Dasáda and Bántva. In Sind it is owing to a falling off in the work done in the Collectorates of Karáchi, Hyderabad and Thar and Párkar. In re-vaccinations there is an increase of only 3 in Western and Baroda, and a decrease of 1,022 in the other districts. On the whole there is a net decrease of 4,735 over the work of last year. There were 20,298 persons primarily vaccinated and 761 re-vaccinated. The respective numbers of successful cases were 18,926 and 424. The percentages of success were 93·24 and 55·72 against 90·06 and 65·11 in 1884-85. The unsuccessful and unknown were 828 and 597 in primary vaccinations, and 222 and 115 in re-vaccinations. The number of secondary operations was 53. No person was re-vaccinated more than once.

Work performed in the Army generally.

30. The following table shows details of vaccination in the Army generally and amongst camp followers:—

		PRIMARY VACCINATIONS.																	
		1		2					3			4					5	6
		Sex.		Caste.					Age.			Results.						
												Successful.			Unsuccessful and doubtful.	Unknown.	Total.	Excess of Operations over Persons.
		Males.	Females.	Christians.	Hindus.	Mussulmans.	Parsis.	Other Castes.	Under 1 year.	Between 1 and 6 years.	Above 6 years.	Under 1 year.	Above 1 and 6 years.	Total of all Ages.				
British Army.																		
Regiments..	1884-85 ..	74	63	137	..	..	.	..	134	3	..	124	3	127	9	1	137	..
	1885-86 ..	88	58	146	1	..	..	..	131	..	15	117	..	130	9	7	146	..
Camp Followers.	1884-85 ..	97	94	8	159	13	2	15	143	26	22	132	26	178	13	..	191	..
	1885-86 ..	30	30	..	56	4	..	..	50	9	1	48	9	58	2	..	60	..
Total ..	1884-85 ..	171	157	145	153	13	2	15	277	29	22	256	29	305	22	1	328	..
	1885-86 ..	118	88	145	57	4	..	..	181	9	16	165	9	188	11	7	206	..
Native Army.																		
Regiments..	1884-85 ..	624	605	21	775	375	2	46	871	198	160	819	145	1,082	142	7	1,231	2
	1885-86 ..	596	442	18	777	206	..	37	735	195	108	711	189	947	90	4	1,041	3
Camp Followers.	1884-85 ..	1,297	1,028	28	1,156	747	9	385	1,961	211	153	1,732	165	2,030	228	53	2,325	..
	1885-86 ..	1,352	730	43	853	782	33	371	1,539	271	272	1,447	248	1,954	102	26	2,082	..
Total ..	1884-85 ..	1,921	1,633	59	1,931	1,122	11	431	2,832	409	313	2,601	300	3,121	370	65	3,556	2
	1885-86 ..	1,948	1,172	61	1,630	988	33	408	2,274	466	380	2,158	437	2,901	192	30	3,123	3

		RE-VACCINATIONS.							PERCENTAGES OF SUCCESSFUL CASES.	
		7		8			9	10	11	
		Sex.		Results.			Total.	Excess of Operations over Persons.	In Primary Vaccinations.	In Re-vaccinations.
		Males.	Females.	Successful	Unsuccessful and doubtful.	Unknown.				
British Army.										
Regiments ...	1884-85 ...	85	5	65	24	1	90	...	92·77	72·22
	1885-86 ...	76	10	69	22	...	91	5	89·04	80·23
Camp Followers .	1884-85 ...	50	7	49	8	...	57	...	93·19	85·96
	1885-86 ...	36	...	28	8	...	36	...	96·67	77·78
Total ...	1884-85 ...	135	12	114	32	1	147	...	92·99	77·55
	1885-86 ...	112	10	97	·30	...	127	5	91·26	79·51
Native Army.										
Regiments ...	1884-85 ...	1,010	204	730	477	7	1,214	...	88·04	60·13
	1885-86 ...	574	44	453	158	7	618	...	91·23	73·30
Camp Followers..	1884-85 ...	143	78	124	93	4	221	...	87·70	56·11
	1885-86 ...	57	6	47	16	...	63	...	93·85	74·60
Total ...	1884-85 ...	1,153	282	854	570	11	1,435	..	87·82	59·51
	1885-86 ...	631	50	500	174	7	681	...	92·98	73·42

European Troops.

31. Amongst European troops the number of persons primarily vaccinated was 206, and in 188 cases, or 91·26 per cent., the operation was successful. The unsuccessful and unknown cases amounted to 11 and 7 respectively: there were no secondary operations. The re-vaccinations were 122, of which 97, or 79·51, were successful, whilst 30 were unsuccessful: there was no unknown case. In five cases the re-vaccination was repeated. Last year there were 328 persons primarily vaccinated and 147 were re-vaccinated: so there is a decrease of 147 persons.

Native Troops.

32. In the Native Army the primarily vaccinated numbered 3,120 and the re-vaccinated 681 against 3,554 and 1,435 in 1884-85. In primary vaccinations there is a decrease of 434, and in re-vaccinations of 754. The number of persons primarily vaccinated successfully was 2,901, or 92·98 per cent. In re-vaccinations there were 500, or 73·42 per cent., successful. The unsuccessful and unknown cases numbered respectively 192 and 30 in primary vaccinations, and 174 and 7 in re-vaccinations. Secondary operations were only 3, and no person was re-vaccinated more than once. The work performed by vaccinators in the military stations of Mhow, Neemuch and Nasirabad is included, as usual, in that for camp followers.

Average number of operations per each kind of establishment.

33. The average number of persons operated on by different establishments is specified below for the years 1885-86 and 1884-85 :—

No.	Establishments.	Average Number of Persons operated on.	
		1884-85.	1885-86.
1	2 Government Vaccinators	2,324	2,688
2	45 Municipal do.	1,521	1,411
3	1 Cantonment do.	897	912
4	268 Local Fund do.	1,822	1,842
5	160 Native State do.	1,970	1,989
6	476 for the whole Presidency	1,842	1,854

There is an increase under all establishments except municipal, owing to there being more oparations performed this year than in 1884-85 in proportion to the more vaccinators employed.

Average number of operations per Vaccinator by Districts and Circles.

34. The subjoined table indicates the averages by districts and circles :—

No.	Districts and Circles.	Average Number of Persons vaccinated by each Vaccinator.		Names of Deputy Sanitary Commissioners and Superintendents.
		1884-85.	1885-86.	
1	Western Gujarát Circle ...	2,817	2,832	Drs. F. C. Barker and E. Tully.
2	Baroda Circle	2,091	2,195	Dr. Samsudin J. Suleman.
3	Presidency Circle	2,255	2,149	Drs. Sakkárám Arjun and Ganesh Ramchandra Desái.
4	Central Registration District ...	2,013	2,119	Dr. C. W. MacRury.
5	Eastern Gujarát Registration District.	1,838	1,834	Dr. M. B. Colah.
6	Sind Registration District ...	1,682	1,763	Dr. J. Parker.
7	Southern Registration District .	1,613	1,557	Dr. O. H. Channer.
8	Western Registration District .	1,428	1,396	Drs. J. C. H. Peacocke, K. R. Kirtikar, A. W. F. Street and J. W. Clarkson.
9	Cutch Circle	1,216	1,242	Dr. P. J. Damania.
10	Aden	412	610	Drs. J. Crimmin, Charles Monks and C. F. Wellis
	Khelat	262	647	
	Average for the whole Presidency.	1,842	1,854	

The averages are below those of last year in the Presidency Circle, Eastern Gujarát, Southern and Western Registration Districts. Western Gujarát stands

first like last year, and Baroda has risen from the 3rd to the 2nd place; whilst the Presidency Circle has fallen from the 2nd to the 3rd place. The seven others—Western, Central, Southern, Eastern Gujarát, Sind, Cutch and Aden—hold the same places as last year.

English Lymph.

35. The subjoined statement shows the result of the English lymph received during the year :—

Supplies received in	No. on the Packet.	Districts and Circles.	Number of: Tubes received and tested.	Number of: Children operated on.	Number of: Insertions.	Number of: Resulting Vesicles.	Character of Vesicles.	Remarks.
November 1885.	408	Western Registration District..	6	6	22	10	6 good, 4 middling	Failure in two tubes.
	402	Central Registration District ..	6	7	39	19	Large	Lymph was pure. Fourteen children were vaccinated with the lymph from these vesicles.
	83	Southern Registration District .	6	4	24	17	Size of pulse ..	Lymph good.
	276	Eastern Gujarát Registration District.	6	6	28	17	Middling, good ..	Eight children were vaccinated with the lymph from these vesicles.
	306	Western Gujarát Circle	6	6	26	7	Small	Good.
	307	Sind Registration District ..	7	5	29	..	....	Total failure. Two tubes broken in transit.
	83	Baroda	4	3	18	9	Good and characteristic.	
	171	Cutch	4	4	16	9	Good..	Failure in one tube.
		Total ..	45	41	212	88		
December 1885.	282	Western Registration District ..	6	4	23	18	Good.	
	284	Central Registration District ..	6	7	44	26	Large	Lymph was pure. Twenty children were vaccinated with the lymph from these vesicles.
	468	Southern Registration District .	6	4	21	7	Good..	The results are not good.
	415	Eastern Gujarát Registration District.	6	5	24	2	Middling.	
	415 / 409	Western Gujarát Circle	6	5	30	6	Small; bad.. ..	Five tubes tested.
	419	Sind Registration District ..	7	7	42	16	Good..	Failure in four tubes.
	273	Baroda	4	4	24	9	Good and characteristic.	
	409	Cutch	4	4	16	4	Middling	Failure in two tubes.
		Total ..	45	40	224	88		
	Reserved.	Aden	6	6	18	..	....	
	June 85.		6	6	18	6	Good.	
	Sept. ..		6	6	18	9	Good.	
	Dec. ..							
	March 1886.		6	6	18	3	Good.	
			6	..	..	..	....	Kept in reserve.
		Total ..	30	24	72	18		
		Grand Total ..	120	105	508	194		

There were 6 separate consignments, 2 of 45 tubes each, for the Bombay District and 4 for Aden, where English lymph is now sent direct. The two Bombay consignments proved ineffectual in the Western, Eastern Gujarát and Sind Registration Districts, and Cutch Circle. In Aden the twenty-four tubes produced 18 good vesicles out of 72 insertions on the arms of 24 children,—a better result than last year.

Quality of the Lymph in use.

36. The quality of the lymph in use was throughout good.

Lymph supplied.

37. During the year lymph was supplied to the Medical Officer Devláli, and Civil Administrative Medical Officer for Central India Indore, from the Deputy Sanitary Commissioner of the Western R. D.; to the Medical Officers, Suakim, Rangoon, Burma and Devláli, from the Presidency Circle; to the Medical Officer Mominabad, Civil Surgeon Poona, Surgeon to H. E. the Governor, Civil Surgeon Sátára, Station Hospital Poona, Medical Officers, Zanzibar and Raichore, from the Deputy Sanitary Commissioner of the Central R. D.; to the Medical Officers, Western Rájputána States and Jodhpur Mission, P. W. O. Grenadiers Ahmedabad, from the Deputy Sanitary Commissioner of the Eastern Gujarát; to the several Military and Civil Medical Officers from Western Gujarát; and to the Medical Officers,

British Troops, Quetta, 14th and 26th N. I,. Bolan Pass, Mach, Nara Jail and Sibi, from Sind.

Animal Vaccination.

38. Animal vaccination was carried on in Bombay, Poona City and Cantonment, Broach Collectorate and Rájkot. In Western Gujarát animal vaccination was carried on in Rájkot in the commencement of cold weather by Mr. Sardármiya Nánámiya, the 2nd Class Assistant Superintendent of Vaccination, who inoculated 6 heifers successfully at a cost of Rs. 22-2-9, and the lymph was distributed among the vaccinators.

The annexed table shows the number of heifers inoculated and the monthly result of the operations in Bombay and Poona where animal lymph was kept up throughout the year :—

Months.	Poona City.			Poona Cantonment.			Bombay.			Total.		
	Heifers inoculated.	Successful.	Unsuccessful.	Heifers inoculated.	Successful.	Unsuccessful.	Heifers inoculated.	Successful.	Unsuccessful.	Heifers inoculated.	Successful.	Unsuccessful.
April 1885..	5	5	..	8	8	..	42	42	..	55	55	..
May..	4	4	..	7	7	..	44	43	1	55	54	1
June	3	3	..	4	3	1	42	40	2	49	46	3
July	4	4	..	6	4	1	45	42	3	54	50	4
August	5	4	1	5	4	1	45	43	2	55	51	4
September..	2	2	..	4	4	..	44	40	4	50	46	4
October	5	4	1	5	5	..	45	35	10	55	44	11
November..	3	3	..	4	4	..	45	41	4	52	48	4
December..	4	4	..	4	4	..	45	40	5	53	48	5
January 1886	5	5	..	5	5	..	44	43	1	54	53	1
February..	4	4	..	4	4	..	44	41	3	52	49	3
March	5	5	..	4	4	..	45	39	6	54	48	6
Total ..	49	47	2	59	56	3	530	489	41	638	592	46

In Poona 47 out of 49 heifers were successfully inoculated. Their cost was Rs. 118-9-0 against Rs. 140-10-0 last year. In Poona Cantonment 56 out of 59 heifers were successfully inoculated at a cost of Rs. 189-1-0 against Rs. 227-8-0 in 1884-85.

In Bombay 530 heifers were inoculated against 492 during the preceding year. On 41 heifers the operations proved unsuccessful. The total cost was Rs. 7,342-8-8, whilst last year it was Rs. 4,801-2-11. The increase is wholly due to the increased prices of the calves and hay.

The subjoined table shows the details of the work of animal vaccination carried on in the Collectorate of Broach :—

Collectorates and Ta'luka's.	No. of Villages in which Animal Vaccination was carried on.	Heifers inoculated.			Vaccinations performed from Heifer Lymph.								Extra Expenditure incurred on Animal Vaccination.	During what Months Heifer Vaccination was carried on
					Primary Vaccinations.				Re-vaccinations.					
		Successful.	Unsuccessful.	Total.	Successful.	Unsuccessful.	Unknown.	Total.	Successful.	Unsuccessful.	Unknown.	Total.		
Broach Collectorate.													Rs. a. p.	
Broach R. C. ..	82	104	1	105	1,459	107	29	1,595	4	7	3	14	45 5 0	From April 1885 to January 1886.
Jambusar „ ..	6	17	2	19	272	29	1	302	..	..	..	..	11 8 6	May 1884 to March 1885.
Total ..	88	121	3	124	1,731	136	30	1,897	4	7	3	14	56 13 6	

Except in Bombay, where animal lymph only is used, and in Poona, Broach, Jambusar and Rájkot, where both animal and human lymph were in use, vaccination in all other places was carried on from arm to arm and with human lymph. Vaccination with animal lymph was also carried on in Bándra. The total number of heifers inoculated was 769 against 1,046 last year; in 50 the virus did not take; the total cost was Rs. 7,729-2-11 against Rs. 5,278-2-11 last year.

39. The total expenditure on account of vaccination is shown in the following table:—

Expenditure.

Establishment.	Total Expenditure. 1884-85.	Total Expenditure. 1885-86.	Compared with the preceding year. +Increase. —Decrease.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Provincial	1,16,994 2 7	1,13,913 7 0	—3,080 11 7
Municipal	24,611 7 3	27,350 7 0	+2,738 15 9
Cantonment	775 11 6	749 0 0	—26 11 6
Local Fund	82,473 12 4	83,025 10 0	+551 13 8
Native State	54,848 13 1	55,554 5 6	+705 8 5
Total ...	2,79,703 14 9	2,80,592 13 6	+3,996 5 10 —3,107 7 1
			+888 14 9

The increase under "Municipal," "Local Funds" and "Native States" is due to the entertainment of additional vaccinators and peons.

40. The total cost for the whole Presidency, including all charges, was Rs. 2,80,592-13-6, whilst the successful cases, excluding dispensaries and the army, amounted to 831,290. The average cost per each successful case was annas 5-5, or 4 pies less than last year.

Cost of each successful case, including all charges.

41. The total cost and the cost per each successful case, after deducting the pay of the Deputy Sanitary Commissioners and Superintendents, is shown in the following table by districts and circles compared with that for 1884-85:—

Cost of each successful case, after deducting the pay of the Supervising Officers by Districts and Circles.

Names of Districts and Circles.		Deputy Sanitary Commissioners and Superintendents.	Successfully Vaccinated and Re-vaccinated.	Total Cost, excluding the Pay of Deputy Sanitary Commissioners and Superintendents.	Average Cost of each Successful Vaccination.	Number of Vaccinators.
				Rs. a. p.	Rs. a. p.	
Western Registration District ..	1884-85..	Drs. J. C. H. Peacocke, K R. Kirtikar, A. W. F. Street, and J. W. Clarkson.	90,670	28,812 11 0	0 5 1	65
	1885-86..		91,323	29,358 5 6	0 5 2	67
Presidency Circle	1884-85..	Drs. Sakhárám Arjun and Ganesh Rámchandra Deskí.	17,340	13,813 6 11	0 12 9	5
	1885-86..		16,434	16,338 3 4	0 15 11	9
Central Registration District ..	1884-85..	Dr. C. W. MacRury	149,950	36,453 3 5	0 3 11	78
	1885-86..		170,398	35,922 0 11	0 3 4	85
Southern Registration District..	1884-85..	Dr. O. H. Channer	124,243	38,340 15 4	0 4 11	82
	1885-86..		134,069	38,812 7 1	0 4 8	91
Eastern Gujarát Registration District.	1884-85..	Dr. M. B. Colah	118,493	29,633 10 7	0 4 0	67
	1885-86..		127,850	31,591 13 4	0 3 11	72
Western Gujarát Circle	1884-85..	Drs. F. C. Barker and E. Tully ..	105,119	22,416 7 5	0 3 5	44
	1885-86..		106,003	21,281 5 1	0 3 3	44
Sind Registration District ..	1884-85..	Dr. J. Parker	59,816	31,622 2 10	0 5 8	60
	1885-86..		97,316	32,509 0 2	0 5 4	60
Baroda	1884-85..	Dr. Samsudin J. Suleman	61,830	12,055 7 5	0 3 1	31
	1885-86..		65,238	12,162 7 5	0 3 0	31
Cutch	1884-85..	Dr. P. J. Damania	20,485	6,670 7 10	0 5 3	17
	1885-86..		20,860	7,094 9 1	0 5 5	17
Aden	1884-85..	Drs. J. Crimmin, Charles Monks and C. F. Wellis.	328	414 1 9	1 4 2	1
	1885-86..		583	429 0 0	0 11 6	1
Khelat	1885-86..	.....	626	....	....	..
		Total .. 1884-85..	778,277	220,232 10 6	0 4 6	454
		Total .. 1885-86..	831,290	225,585 8 11	0 4 4	477

The cost per each successful case was more than last year in the Western Registration District, Presidency Circle and Cutch. The total cost was Rs. 2,25,585-3-11, which, when divided amongst 831,290 successful cases, amounts to annas 4-4, or 2 pies less than for the previous year.

Work of Deputy Sanitary Commissioners and Superintendents of Vaccination.

42. The inspectorial work performed by the supervising officers is shown in the following table :—

Names of Districts and Circles.		Deputy Sanitary Commissioners and Superintendents.	Number of Encampments.	Number of Travelling Days.	Distance travelled in Miles.	Number of Villages visited.	Number of Vaccinated Children inspected.
Western Registration District	1884-85	Drs. J. C. H. Peacocke, K. R. Kirtikar, A. W. F. Street and J. W. Clarkson.	38	150	4,233	167	6,412
	1885-86		33	89	1,606	124	4,660
Central Registration District	1884-85	Dr. C. W. MacRury	51	127	1,953	247	8,699
	1885-86		21	64	2,122	136	4,053
Southern Registration District	1884-85	Dr. O. H. Channer	75	154	2,633½	167	5,887
	1885-86		55	148	2,618	180	7,241
Eastern Gujarát Registration District.	1884-85	Dr. M. B. Colah	49	157	2,505	331	9,736
	1885-86		42	146	2,001	297	7,405
Western Gujarát Circle	1884-85	Drs. F. C. Barker and E. Tully	42	97	1,627	170	23,841
	1885-86		43	70	1,175	120	14,449
Sind Registration District	1884-85	Dr. J. Parker	51	132	2,084	295	7,683
	1885-86		48	149	1,932	284	7,963
Total	1884-85		306	817	15,637½	1,377	62,258
	1885-86		242	672	11,454	1,141	45,971

In Western Gujarát 14,449 children were inspected by Dr. Tully against 23,841 last year; 12,223 of these were inspected without the test of calling their names from the register; next to it is Eastern Gujarát, in which the number inspected amounted to 7,405 against 9,736 in 1884-85; the least number inspected was in the Central, in which only 4,053 children were inspected against 8,699 in 1884-85. For the Presidency the total number of children inspected is less than last year by 17,087 :—

Districts and Circles.		Work tested by calling Names from Registers.												
		Number of Vaccinated Children inspected.	Present during Inspection.				Absent during Inspection.		Number of Persons whom the Vaccinator has returned as vaccinated.				
			Successful.			Unsuccessful.	Absence accounted for.	Absence unaccounted for.	Successful.	Unsuccessful and doubtful.	Unknown.	Total.	Excess of Operations over Persons.
			Good.	Middling.	End.								
Western Registration District	1884-85	4,949	3,014	988	792	245	2,027	..	7,273	210	97	7,580	4
	1885-86	2,862	1,867	533	315	142	2,019	..	4,709	83	92	4,884	3
Central Registration District	1884-85	7,924	6,703	564	483	174	5,383	..	12,899	198	231	13,338	11
	1885-86	3,429	3,045	233	109	89	1,757	..	4,868	82	233	5,183	..
Southern Registration District	1884-85	4,238	2,827	875	309	137	3,124	..	6,873	235	244	7,352	..
	1885-86	3,564	1,115	1,275	1,683	115	1,948	..	5,134	78	277	5,509	..
Eastern Gujarát Registration District.	1884-85	9,736	5,794	2,543	1,015	394	2,476	1	11,651	434	163	12,248	35
	1885-86	7,405	4,546	1,749	609	210	1,765	..	8,839	207	119	9,225	55
Western Gujarát Circle	1884-85	1,130	302	340	424	64	566	..	1,437	118	141	1,696	..
	1885-86	2,226	763	583	502	58	1,106	..	2,944	203	185	3,332	..
Sind Registration District	1884-85	4,452	1,623	1,206	1,357	265	2,553	..	6,176	459	383	7,020	15
	1885-86	5,610	2,424	1,515	1,259	413	3,803	..	8,205	574	695	9,474	21
Total	1884-85	32,429	20,263	6,396	4,470	1,280	16,739	1	46,314	1,654	1,266	49,234	79
	1885-86	25,090	14,078	5,893	4,142	977	12,398	..	34,719	1,287	1,561	37,567	65

Inspections from Vaccination Registers.

43. It will be seen from the above table that for 45,171 children the results in 25,090 instances were tested by calling their names from registers, in which there were enrolled the names of 37,488 children, of whom 65 were

vaccinated more than once on account of the failure of the first operation. The results given by vaccinators were 34,719 as unsuccessful, 1,208 unsuccessful, exclusive of 79 secondary operations, and 1,561 unknown; while on inspection they were found to be 24,113, 977 and 12,398. Excluding the "unknown," or rather the number of children "absent" at the time of inspection, from both sides, the vaccinators' figures give the percentages of 96·64 as successful and 3·36 as unsuccessful, while the inspection figures give them as 96·11 and 3·89. This test shows that the result noted by vaccinators is more by only 0·53 per cent. Again, out of 24,113 or 96·11 successful children there were 14,078 or 56·11 who had "good" cicatrices on their arms, 5,893 or 23·49 "middling," and 4,142 or 16·51 "bad." These results show the degree of protection afforded. The greatest number of inspections was in the Eastern Gujarát and Sind Registration District, whilst the least was in Western Gujarát. The number of children whose arms were inspected without the register test was 20,081, of whom 12,223 were in the Western Gujarát, 3,680 in the Southern, and 1,798 in the Western, whilst in Sind they were 1,753 and in the Central only 627 In Eastern Gujarát no inspections were held without the register test.

Truthfulness of Vaccination Registers.

Classification of successful cases.

Inspections without Vaccination Registers.

Remarks on the work of the Supervising Officers.

44. All the supervising officers have worked zealously and conscientiously throughout the year and have given me every assistance.

Work of Inspectors and Assistant Superintendents.

45. The work of Inspectors and Assistant Superintendents of Vaccination is detailed by districts and circles in the table subjoined:—

Districts and Circles.		Number of Encampments.	Number of travelling Days.	Distance travelled in Miles.	Number of Villages visited.	Work tested by calling Names from Registers.												
						Number of vaccinated Children inspected.	Present during Inspection.				Absent during Inspection.		Number of Persons whom the Vaccinator has returned as vaccinated.				Excess of Operations over Persons.
							Successful.			Unsuccessful.	Absence accounted for.	Absence unaccounted for.	Successful.	Unsuccessful and doubtful.	Unknown.	Total.	
							Character of Vesicles and Cicatrices.										
							Good.	Middling.	Bad.								
Western Registration District.	1884-85.	491	948	9,784	1,165	32,604	23,846	3,807	3,866	1,685	12,902	89	44,735	427	438	45,600	55
	1885-86.	556	1,188	10,531	1,484	37,312	24,858	6,024	4,406	2,024	13,440	12	49,801	578	439	50,869	45
Central Registration District.	1884-85.	606	1,580	11,876	1,555	51,088	36,786	8,647	3,821	1,834	17,767	..	65,912	932	2,094	68,938	83
	1885-86.	702	1,802	12,302	1,872	59,029	47,088	7,265	4,042	1,225	20,928	..	76,443	959	3,196	80,598	50
Southern Registration District.	1884-85.	743	1,134	10,869	1,342	45,997	35,419	6,489	2,759	1,330	18,610	..	61,576	1,122	1,943	64,641	25
	1885-86.	453	900	9,126	1,112	30,964	20,367	5,923	3,370	714	11,877	2	40,417	847	1,310	42,274	31
Eastern Gujarát Registration District.	1884-85.	354	913	10,220	2,046	39,988	26,955	9,440	2,571	1,022	3,504	1	46,500	1,141	966	48,607	204
	1885-86.	355	1,047	10,568	2,412	47,133	31,654	10,892	3,310	1,277	9,812	..	56,115	1,111	859	57,085	140
Western Gujarát Circle.	1884-85.	130	208	2,914	422	18,300	10,063	4,287	2,798	1,052	6,061	..	21,218	2,321	1,347	24,886	25
	1885-86.	101	202	2,272	336	10,715	5,178	2,304	2,385	848	2,750	..	11,526	1,258	727	13,500	11
Sind Registration District.	1884-85.	679	1,178	15,864	2,829	34,763	10,812	11,016	9,594	3,339	18,851	12	47,070	2,751	3,945	53,766	140
	1885-86.	828	1,459	15,457	3,375	38,081	14,513	10,671	9,980	2,962	17,159	7	49,863	2,390	3,086	55,339	92
Cutch..	1884-85.	131	247	1,622	476	14,376	12,890	73	834	579	1,986	44	16,294	168	23	16,485	79
	1885-86.	156	190	1,900	544	13,141	11,711	330	672	419	3,223	42	16,299	240	30	16,569	163
Baroda..	1884-85.	966	971	8,220	1,438	32,888	25,705	4,432	1,991	757	6,051	..	37,247	1,629	769	39,645	100
	1885-86.	805	895	6,487	1,231	33,670	27,621	3,598	1,709	742	7,163	..	38,017	1,109	809	40,925	92
Total..	1884-85.	4,240	7,246	71,483	11,332	270,501	182,476	48,193	27,734	12,098	90,741	96	340,642	9,891	11,529	3,62,058	720
	1885-86.	3,946	7,692	68,651	12,366	270,036	182,985	47,016	29,824	10,211	86,382	63	338,381	8,187	10,537	3,57,105	624

Thirty-one Inspectors and 4 Assistant Superintendents were on travelling duty. Of this number 27 Inspectors and 2 Assistant Superintendents were paid by Government, and the remainder by Native States. The names of 356,481 children

were called from the registers, of whom 270,036 were present, 86,382 were absent, but their absence was accounted for, whilst 63 had migrated. Out of 270,036 children inspected, 259,825, or 96·22 per cent., were protected, and in 10,211 cases, or 3·78 per cent., the operation was unsuccessful. Again out of 259,825, or 96·22 per cent. successful cases, 182,985 or 67·76 per 100 had "good" cicatrices, 47,016 or 17·41 "middling," and 29,824 or 11·05 "bad." In the registers tested, the results were entered as 338,381 successful, 8,187 unsuccessful, 10,537 unknown or absent, and 624 secondary operations. Excluding the unknown and secondary operations from calculation, and comparing these results with the number inspected, the percentages of successful and unsuccessful cases are respectively 97·81 and 2·19. This shows that the results recorded by the vaccinators are approximately correct. The rate of travelling was not so quick as last year, except in Cutch, in consequence of the greater number of villages seen in almost all districts except in the Southern, Western Gujarát and Baroda. The greatest number of villages seen was in Sind and Eastern Gujarát. The number of children inspected was greater in all the districts except in Southern, Western Gujarát, and Cutch. One Inspector from the Central was promoted to the 1st grade and transferred to the Southern Registration District, and one Inspector was promoted from the 3rd to the 2nd Class in the Southern Registration District. One 1st Class Inspector retired and one 3rd Class Inspector resigned in the Southern Registration District. There were a few transfers. The conduct of the inspecting officers, with one or two exceptions, was reported as good and satisfactory.

Their conduct.

46. Taking the work of all the Deputy Sanitary Commissioners, Superintendents, Assistant Superintendents and Inspectors together, there were 4,188 encampmets, 80,105½ miles travelled in 8,364 days, and 315,207 children inspected in 13,507 villages. Out of every 100 persons operated on, 34·72 were this year inspected against 38·44 in the preceding year.

Total Inspections.

47. Three vaccinators—1 in the Central, 1 in Southern and 1 in Eastern Gujarát—were suspended for misconduct. Six vaccinators—1 in the Western, 4 in the Central, and 1 in the Southern Registration District—were degraded. Five vaccinators—3 in the Western, 1 in the Presidency Circle and 1 in Sind—died. Six vaccinators and 7 candidate vaccinators resigned the service. Two vaccinators retired. Fifty-seven vaccinators were transferred. Six vaccinators were promoted. Four candidate vaccinators were appointed as vaccinators. There were 25 new appointments—3 vaccinators in the Western, 7 vaccinators and 1 candidate vaccinator in the Central, 9 vaccinators in the Southern, and 5 vaccinators in Eastern Gujarát. The conduct of the vaccinators generally was good.

Conduct of Vaccinators.

48. Three clerks—1 in the Western, 1 in the Central and 1 in the Southern—were promoted to higher grades. All of them worked to the entire satisfaction of their superiors.

Clerks.

49. Inoculation was not practised anywhere in the districts. It was reported to have been practised in two villages of Mángaon Táluka, Kolába Collectorate, and in the Nausháhro Táluka, Hyderabad Collectorate; but upon enquiry no evidence was found forthcoming. Dr. Parker says that "a similar report from Shikárpur Táluka is under enquiry."

Inoculation.

50. No instances were reported of any other disease but cow-pox having been communicated through vaccination.

Ill-effects by Vaccination.

Ulceration on the arm of a child in the site of the vaccine vesicles was observed by Dr. Desái in the Presidency Circle, and axillary abscesses and inflamed arms in a few instances were also observed by Dr. Colah in Eastern Gujarát. In Western Gujarát Dr. Tully observed a few unhealthy ulcers produced by the application of filthy clay, and in Cutch Dr. Damania observed a few instances of eczematous eruptions.

51. The Civil, Revenue and Political officers have rendered aid, when required, to all the officers of this department.

Aid from Civil, Revenue and Political Officers.

52. The table given below shows the deaths from small-pox for the years 1884-85 and 1885-86, as well as the ages of the deceased and the number of persons successfully operated on in each district of the Bombay Presidency :—

Small-pox by Collectorates and Registration Districts.

No.	Districts and Circles.		Years.	Deaths from Small-pox. Total Deaths.	Ages. Under 1 year.	Ages. Under 12 years.	Number of Persons successfully operated on.
1	Western Registration District.	Khándesh Collectorate ...	1884-85	69	24	40	38,469
			1885-86	70	19	43	38,940
2		Nasik do. ...	1884-85	422	155	198	19,886
			1885-86	50	14	26	20,033
3		Thána do. ...	1884-85	346	133	195	18,755
			1885-86	58	10	20	19,366
4		Kolába do. ...	1884-85	262	90	137	18,007
			1885-86	147	50	85	13,894
		Total ...	1884-85	1,099	402	570	95,117
			1885-86	325	93	174	92,233
5	Presidency Circle.	Bombay City	1884-85	101	38	36	17,400
			1885-86	43	17	16	16,488
6	Central Registration District.	Ahmednagar Collectorate ...	1884-85	51	26	10	26,654
			1885-86	19	8	3	29,516
7		Poona do. ...	1884-85	281	77	156	24,334
			1885-86	158	59	93	28,276
8		Sholápur do. ...	1884-85	343	126	207	25,008
			1885-86	26	11	12	24,511
9		Sátára do. ...	1884-85	823	276	326	38,204
			1885-86	9	2	1	40,463
10		Ratnágiri do. ...	1884-85	678	132	301	25,696
			1885-86	117	26	35	32,738
		Total ...	1884-85	2,176	637	1,000	139,896
			1885-86	329	106	144	155,524
11	Southern Registration District.	Belgaum Collectorate ...	1884-85	1,530	171	373	23,944
			1885-86	61	6	11	29,887
12		Dhárwár do. ...	1884-85	1,465	265	317	30,067
			1885-86	249	1	8	31,586
13		Bijápur do. ...	1884-85	500	137	185	23,414
			1885-86	32	10	11	21,747
14		Kánara do. ...	1884-85	1,049	109	268	11,531
			1885-86	161	13	19	10,270
		Total ...	1884-85	4,544	682	1,143	88,956
			1885-86	503	30	49	93,489
15	Eastern Gujarát Registration District.	Surat Collectorate	1884-85	49	18	22	17,234
			1885-86	...	...	...	19,522
16		Broach do.	1884-85	8	1	7	10,721
			1885-86	4	2	1	9,101
17		Kaira do.	1884-85	156	67	86	24,019
			1885-86	87	29	58	24,949
18		Panch Mahále Collectorate ...	1884-85	35	12	16	9,236
			1885-86	19	4	13	9,922
19		Ahmedabad do. ...	1884-85	178	70	95	27,923
			1885-86	14	3	10	27,250
		Total ...	1884-85	426	168	226	89,133
			1885-86	124	38	82	90,744
20	Sind Registration District.	Karáchi Collectorate... ...	1884-85	297	35	79	17,749
			1885-86	115	11	22	18,866
21		Hyderabad do. ...	1884-85	477	141	147	20,828
			1885-86	61	20	24	22,951
22		Thar and Párkar do. ...	1884-85	30	5	7	11,105
			1885-86	8	1	2	12,138
23		Shikárpur do. ...	1884-85	51	16	19	31,523
			1885-86	117	34	34	32,716
24		Upper Sind Frontier ...	1884-85	14	2	5	6,738
			1885-86	29	5	9	7,151
		Total ...	1884-85	869	199	257	87,943
			1885-86	330	71	91	93,822
		Grand Total ...	1884-85	9,215	2,126	3,232	518,445
			1885-86	1,654	355	556	542,200

Small-pox prevailed everywhere throughout the Presidency, but it was not so virulent as in the previous year. The greatest number of deaths took place in the Collectorates of Dhárwár, Kánara, Poona, Kolába, Ratnágiri, Shikárpur, Karáchi and Kaira. There were no deaths from small-pox in the Collectorate of Surat. There is a marked diminution in small-pox deaths on the whole, as also in the Southern, Central and Western Registration Districts.

In Western Gujarát, cases of small-pox were reported to have occurred in 48 villages, 1 each in Rájkot, Junágad, Jamnagar, Palitána, Mangrol, Khambália and Radhanpur; 2 each in Morvi, Jasdan, Kundla and Dhrol; 3 each in Limbdi, Mália and Dhoráji; 4 in Wadhwán; and 5 each in Porbandar, Drapha, Jáfárabad and Bhánwad. On the whole, there were 1,654 deaths against 9,215 in 1884-85, and the number of successful operations was 5,42,220. There were 355 infants, 556 children under 12 years, and 743 persons of all other ages returned under small-pox deaths: last year the respective numbers were 2,126, 3,232 and 3,857. In Baroda 154 cases occurred, of whom 24 proved fatal.

Small-pox occurring after vaccination.

53. A few cases of small-pox occurring after vaccination were noticed by Dr. Damania in Cutch. In Baroda 31 such cases were said to have been reported to the chief Medical Officer of that State.

In Eastern Gujarát, Dr. Colah made full enquiries on the subject. He says:—

"During the year I received from the vaccinators nominal returns of small-pox cases occurring in villages in their charge. A record of 605 cases occurring in 41 villages shows the following results:—By caste 546 were Hindus and 59 Mahomedans; 342 were males and 263 females. Of the total 605 cases, 509 were among unvaccinated; in 96 instances it occurred among persons previously vaccinated, of whom 36 were said to be successfully vaccinated and 60 unsuccessfully vaccinated. Of the total 605 persons, 498 recovered and 107 died. Of the 107 dead, 62 were males and 45 females. 99 deaths occurred among unvaccinated, one in a previously successful vaccination and 7 deaths in previously unsuccessfully vaccinated persons. As regards the ages of the dead, 34 were under 1 year, 50 were of 1 and under 5 years of age, 13 were of 5 and under 10 years, 3 were of 10 and under 15 years, and 7 were of 15 years and above."

Progress in the Western Registration District.

54. The Western Registration District extends over an area of 26,321·6 square miles, comprising the Collectorates of Khándesh, Násik, Thána and Kolába, and the Native States of the Khándesh Agency, Jawhár and Janjira. It has a population of 3,493,821 persons. It was administered by a Deputy Sanitary Commissioner, who had working under him 6 Inspectors of Sanitation and Vaccination, 2 clerks, 6 municipal, 58 local fund, 2 candidate and 3 Native State vaccinators, and 72 peons. An additional vaccinator is required for one town circle. Vaccination returns were received from 29 dispensaries. Each vaccinator, on a average, worked amongst a population of 52,147 persons and in an area of 392·86 square miles. They primarily vaccinated 92,103 and re-vaccinated 1,440 persons: last year the respective numbers were 91,211 and 1,624. There were 90,412 or 98·16 per cent. successful cases under primary vaccinations, and 911 or 63·26 per cent. under re-vaccinations. These together give the total rate of protection as 26·14 per mille of population, whilst last year it was 25·95. The total cost was Rs. 35,585-9-8, and the average cost per each successful case was annas 6 and pies 3, or 4 pies less than last year. Each vaccinator averaged 1,396 persons. The Medical Officers of 29 dispensaries returned 5,147 persons primarily vaccinated and 121 re-vaccinated against 4,861 and 120 in 1884-85. There were 325 deaths from small-pox, whilst last year there were 1,099.

Khándesh Collectorate.

55. In the Khándesh Collectorate there are 26 vaccinators, each of whom had, on an average, an area of 382·4 square miles and a population of 47,586 persons. The primary vaccinations amounted to 37,106, which in 36,412 instances, or 98·13 per cent., were successful; 485 persons were re-vaccinated, and in 392 cases, or 80·82 per cent., successfully. The rate of protection per mille of population was 29·75 against 29·36 in 1884-85. The total cost of vaccination was Rs. 7,134-12-8, or annas 3 and pie 1, or 2 pies less than last year, per each successful case. The average number of operations per each vaccinator was 1,446. The Medical Officers of 9 dispensaries performed vaccination work, which amounted to 2,155

and 57 persons under each kind of operation. There were 70 deaths from small-pox, whilst last year there were 69.

Násik Collectorate.

56. In the Násik Collectorate there are 13 vaccinators, but another is required for the town of Yeola. The average population and area per vaccinator were respectively 60,093 persons and 456·9 square miles. There were 19,186 primary vaccinations and 106 re-vaccinations, of which 18,755 and 91, or 97·75 and 85·85 per cent., were successful. The rate per mille of population protected was 24·12, whilst last year it was 24·04. The total cost was Rs. 3,747-11-9, or annas 3 and pies 2, or 2 pies less than last year per each successful case. Each vaccinator vaccinated 1,484 persons. In 7 dispensaries 1,277 persons were primarily vaccinated and only 1 was re-vaccinated. There were 50 deaths from small-pox against 422 in the preceding year.

Thána Collectorate.

57. The Thána Collectorate has 14 vaccinators. Each vaccinator had, on an average, a population of 57,669 persons and an area of 281·1 square miles. Those primarily vaccinated were 18,254, and those re-vaccinated were 409. The successful cases were 17,091 and 111 or 93·63 and 27·14 per cent. The rate of protection per mille of population was 22·31: last year it was 21·87. Each vaccinator vaccinated 1,333 persons. The total cost was Rs. 3,764-6-11, or annas 3-4 per each successful case against annas 3-10 last year. In 9 dispensaries 1,476 persons were primarily vaccinated and 63 re-vaccinated. There were 58 deaths from small-pox: in the preceding year there were 346.

Kolába Collectorate.

58. In the Kolába Collectorate there are 11 vaccinators. Each vaccinator had, on an average, a population of 43,894 persons and an area of 136·04 square miles. There were 13,573 primary vaccinations and 439 re-vaccinations. The successful cases were 13,363 or 98·45 and 316 or 71·98 per cent. The rate of protection per 1,000 was 28.33 against 27·70 last year. The total cost was Rs. 2,772-10-8. The average cost per successful case was annas 3-3 against annas 3-1 last year. Each vaccinator vaccinated 1,274 persons. In 4 dispensaries 239 persons were primarily vaccinated, and none was re-vaccinated. There were 147 deaths from small-pox against 262 in 1884-85.

Native States in the Western Registration District.

59. The States of the Khándesh Agency, Jawhár and Janjira have a collective area of 4,699 square miles and a population of 185,187 persons. Vaccination work was not carried on this year in the States of Khándesh Agency. There are now 2 vaccinators in Janjira and 1 in the Jawhár State. The number of persons primarily vaccinated and re-vaccinated by the 3 vaccinators in the States of Jawhár and Janjira were respectively 3,984 and 1, and 3,981 cases or 99·92 per cent. were successful under primary vaccination. The re-vaccination case was also successful. The protected were 31·88 per mille of population against 25·76 last year. Each vaccinator, on an average, operated on 1,328 persons. The total cost amounted to Rs. 821-10-9, and the average cost per each successful case was annas 3-4, same as last year.

Progress in the Presidency Circle.

60. The City of Bombay comprises the Presidency Circle. It has an area of 22 square miles with a population of 773,196 persons. It was administered by a Superintendent of Vaccination paid by Government, who had under his orders an Assistant Superintendent, 4 clerks, 1 head vaccinator, 6 public vaccinators, and 2 assistants, 13 kárkúns and 3 peons, all paid by the Municipality. There were 16,521 primary vaccinations and 672 re-vaccinations against 16,168 and 1,874 last year. The successful cases were respectively 15,931 and 503 or 96·43 and 74·85 per cent. The rate per mille of population protected was 21·25 against 22·43 last year. Each vaccinator vaccinated 2,149 persons. The total cost was Rs. 19,890-14-6, or Re. 1-3-4 per each successful case: last year it was Re. 1-0-11. Vaccination was practised by the Medical Officers in the House of Correction and Common Jail. They re-vaccinated 116 persons. There were 43 deaths from small-pox against 101 last year.

Progress in the Central Registration District.

61. The Central Registration District comprises the Collectorates of Ahmednagar, Poona, Sholápur, Sátára and Ratnágiri, the Native States of Akalkot, Modnimb, the Sátára Jághírs and Sávantvádi, a population of 4,858,709 and an area of 30,252·1 square miles. It was administered by a Deputy Sanitary Commissioner, who had under his orders 6 Inspectors of Sanitation and Vaccination, 2 clerks, 8 municipal, 1 cantonment, 66 local fund, 6 candidates and 10 Native State vaccinators and 93 peons. Three additional vaccinators are required for 3 town circles. Vaccinations were performed in 21 dispensaries. The area for each vaccinator was 355·91 square miles, with a population of 57,161 souls. The vaccinators returned 176,955 primary vaccinations and 3,187 re-vaccinations against 151,560 and 5,427 last year. Under each head the successful cases were respectively 168,304 or 95·11 per cent., and 2,094 or 65·70 per cent. There were 35·07 persons per 1,000 of population successfully operated on, whilst last year there were 30·86. The average number of vaccinations performed by each vaccinator was 2,119, and the average cost per each successful case, calculated on the total cost of Rs. 45,521-15-11, was annas 4-3: last year it was annas 4-9. In the dispensaries 3,234 persons were vaccinated and 33 were re-vaccinated. There were 329 deaths from small-pox against 2,176 in 1884-85.

Ahmednagar Collectorate.

62. In the Ahmednagar Collectorate there are 13 vaccinators, and the average population and area per vaccinator were respectively 57,787 persons and 512·8 square miles. There were 30,172 primary vaccinations and 379 re-vaccinations, and the successful cases were respectively 29,037 and 276, whilst the percentages of success were 96·24 and 72·82. The rate per 1,000 of protected was 39·02 against 35·19 last year. Each vaccinator vaccinated 2,350 persons. The total cost was Rs. 3,742-3-2, and the average cost for each successful case was annas 2-1, or 3 pies less than last year. The Medical Officers of 2 dispensaries primarily vaccinated 235 persons, but performed no re-vaccinations. There were 19 deaths from small-pox: last year there were 51.

Poona Collectorate.

63. In the Collectorate of Poona there are 17 vaccinators. The average population and area per vaccinator were respectively 52,978 persons and 314·6 square miles. Out of 29,223 primary vaccinations and 702 re-vaccinations, 27,139 or 92·87 and 447 or 63·68 per cent. were successful. The rate per mille of population protected was 30·63 against 25·91 last year. Each vaccinator, on an average, operated on 1,760 persons. The total cost was Rs. 5,639-14-3. This gives the average cost per each successful case as annas 3-3 against annas 3-10 last year. In 7 dispensaries 751 persons were primarily vaccinated and 2 were re-vaccinated. There were 158 deaths from small-pox: last year there were 281.

Sholápur Collectorate.

64. In the Sholápur Collectorate there are 12 vaccinators, each of whom had, on an average, an area of 376·8 square miles and a population of 48,541 persons. There were 25,282 primary vaccinations and 426 re-vaccinations; of these 24,027 and 291 or 95·04 and 68·31 were successful. The rate per mille of population protected was 41·75 against 42·50 in 1884-85. Each vaccinator vaccinated 2,142 persons. The total cost was Rs. 3,658-4-0, which gives annas 2-5 as the average cost per each successful case: the same as last year. At the Karmála Dispensary 203 persons were primarily vaccinated and 4 were re-vaccinated. There were 26 deaths from small-pox: last year there were 343.

Sátára Collectorate.

65. In the Sátára Collectorate there are 19 vaccinators, but 2 additional ones are required for the towns of Karád and Wái. Each vaccinator had, on an average, a population of 55,913 persons and an area of 262·5 square miles. There were 41,589 persons primarily vaccinated and 225 re-vaccinated. The successful cases in each were 39,029 or 93·84 and 177 or 78·67 per cent. The rate of protection per mille of population was 36·90 against 34·75 in 1884-85. Each vaccinator vaccinated 2,201 persons. The total cost was Rs. 4,839-1-4, or annas 2-0 per each successful case, or 2 pies less than last year. In 7 dispensaries 1,377 persons were primarily vaccinated and 5 were re-vaccinated. There were only 9 deaths from small-pox against 823 last year.

Ratnágiri Collectorate.

66. In the Ratnágiri Collectorate there are 14 vaccinators, but 1 more is required for the town of Ratnágiri. Each vaccinator had, on an average, a population of 71,221 persons and an area of 280·1 square miles. The number of primary vaccinations was 32,854 and of re-vaccinations 488. The successful cases were respectively 32,207 and 409, or 98·03 and 83·81 per cent. The rate of protection per mille of population was 32·71, and last year it was 25·64. The average number of vaccinations for each vaccinator was 2,382. The total cost was Rs. 3,962-13-8, or anna 1-11 per each successful case against annas 2-6 last year. At the Dápoli and Vengúrla Dispensaries 145 persons were primarily vaccinated and none were re-vaccinated. There were 117 deaths from small-pox against 678 in 1884-85.

Native States in the Central Registration District.

67. The Native States are Akalkot, Modnimb, which belongs to the Miraj State, Sátára Jághírs and Sávantvádi. They have a collective population of 564,933 persons and an area of 4,807 square miles. In Modnimb vaccination is carried on by the Mádha Táluka vaccinator of the Sholápur Zilla, as it is close to that táluka. He is paid Rs. 5 per month by the Miraj State. The Sávantvádi State has now 3 vaccinators. The Akalkot State has 1 vaccinator, and the Medical Officers of the Akalkot and Sávantvádi Dispensaries attend to the vaccination work of those towns. The Sátára Jághírs have 6 vaccinators, the Pant Sachiv having now employed 3 instead of 2 vaccinators in his State. The total number operated on, excluding the dispensaries, was 18,802, of which 967 were re-vaccinations. The successful cases were 16,865, or 94·56 per cent., and 494 or 51·09 per cent., under each kind of operation. The rate of protection per 1,000 was 30·73 against 22·89 last year. The total cost was Rs. 2,395-3-8, or annas 2-2 per each successful case, against annas 2-7 last year. In the Akalkot and Sávantvádi Dispensaries 523 persons were primarily vaccinated and only 22 were re-vaccinated.

Progress in the Southern Registration District.

68. The Southern Registration District comprises the Collectorates of Belgaum, Dhárwár, Kaládgi and Kánara, the Kolhápur States, the Southern Marátha Jághírs and the Savanúr State under the Dhárwár Agency. It has a population of 4,132,186 and an area of 24,390·4 square miles. It was administered by a Deputy Sanitary Commissioner, who had under his orders 5 Inspectors of Sanitation and Vaccination, 1 Assistant Superintendent of Vaccination, 2 clerks, 8 municipal, 53 local fund, 4 candidate and 30 Native State vaccinators, and 98 peons. Vaccination was carried on by the Medical Officers of 27 dispensaries. Three additional vaccinators for one town circle and 2 Native States are required to strengthen the establishment. Each vaccinator had an area of 268·03 square miles, with an average population of 45,409 persons. They primarily vaccinated 136,544 and re-vaccinated 5,129 persons, and last year the respective numbers were 127,770 and 4,474. There were 130,593, or 95·64 per cent., successful primary vaccinations, and 3,476, or 67·77 per cent., re-vaccinations, the rate of protection per mille of population being 32·45 against 30·07 last year. The total cost was Rs. 46,012-7-1, and the average cost per each successful case was annas 5-6 against annas 6-0 last year. Each vaccinator vaccinated 1,557 persons. In the dispensaries 4,264 persons were primarily vaccinated and 93 were re-vaccinated. There were 503 deaths from small-pox against 4,544 last year.

Belgaum Collectorate.

69. In the Belgaum Collectorate there are 18 vaccinators. Each vaccinator had, on an average, a population of 48,001 persons and an area of 258·7 square miles. The number of persons under each operation was 29,842 and 1,084. The successful cases were 28,554 and 770, the percentages of success being 95·68 and 71·03, or 33·94 per mille of population against 26·39 for last year. Each vaccinator vaccinated 1,718 persons. The total cost was Rs. 4,580-3-7, or annas 2-6 per each successful case: last year it amounted to annas 3-2. In 5 dispensaries 589 persons were primarily vaccinated and none were re-vaccinated. There were 61 deaths from small-pox against 1,530 last year.

Dhárwár Collectorate.

70. In the Dhárwár Collectorate there are, in all, 20 vaccinators, each of whom had, on an average, a population of 44,145 persons and an area of 226·7 square miles. There were

32,136 persons primarily vaccinated and 1,047 re-vaccinated. The successful cases in each were 30,825 and 662, or 95·92 and 63·90 per cent. Out of every 1,000 persons 35·67 were successfully vaccinated against 33·95 in 1884-85. The average number of vaccinations performed by each vaccinator was 1,659. The total cost was Rs. 6,051-15-4, or annas 3-1 per each succcessful case, or 2 pies less than last year. In Háveri Dispensary 92 persons were primarily vaccinated and none were re-vaccinated. There were 249 deaths from small-pox: last year there were 1,465.

Bijápur Collectorate.

71. In the Bijápur Collectorate there are 9 vaccinators. The Bágalkot town vaccinator attends to the vaccination work in the surrounding villages of the táluka besides the town, and, consequently a moiety of his pay is defrayed by the municipality as well as by the local fund committee. Three additional vaccinators have been sanctioned by the Local Board since 1st April 1886, to complete the establishment. Each vaccinator had, on an average, a population of 70,944 persons and an area of 639·7 square miles. The number of persons primarily vaccinated was 20,813 and those re-vaccinated were 577. The successful cases in each were 20,268 or 97·38, and 390 or 67·59 per cent. The rate of protection per mille of population was 32·35 against 35·03 in the preceding year. The average number of vaccinations performed by each vaccinator was 2,377 persons. The total cost was Rs. 2,610-4-8, or annas 2-0 per each successful case against annas 2-7 in 1884-85. Vaccination was carried on in 6 dispensaries—at Bágevádi, Ilkal, Bijápur, Muddebihál, Indi and Sindgi, and the number of persons primarily vaccinated was 1,129, and those re-vaccinated were only 15. There were 32 deaths from small-pox against 500 last year.

Kánára Collectorate.

72. In the Kánara Collectorate there are 14 vaccinators. Each had, on an average, a population of 30,131 persons and an area of 279·3 square miles. Those primarily vaccinated were 10,557 and those re-vaccinated were 651. The numbers of successful cases were respectively 9,482 and 463, the percentages being 89·82 and 71·12. The rate of protection per mille of population was 23·58: last year it was 25·60. Each vaccinator vaccinated 801 persons. The total cost was Rs. 3,874-4-5, or annas 6-3 per each successful case against annas 5-8 in the previous year. In 5 dispensaries 346 persons were primarily vaccinated and 5 were re-vaccinated. There were 161 deaths from small-pox, whilst last year there were 1,049.

Native States in the Southern Registration District.

73. The States of Kolhápur, the Southern Marátha Jághírs and the Savanúr State, under the Dhárwár Agency, have a collective area of 5,531 square miles and a population of 1,324,932 persons. There were 30 vaccinators, as 2 additional vaccinators have been entertained in the States of Shirhatti and Kolhápur Town, but 2 more are required for Gad Hinglaj and Panhála in the Kolhápur States. The Kolhápur States have 1 Assistant Superintendent of Vaccination, and the Jamkhandi State has an Inspector of Sanitation and Vaccination. There were 43,196 persons primarily vaccinated and 1,770 re-vaccinated. The successful cases of each kind were 41,464 and 1,184. The percentages of success were respectively 95·99 and 66·89. The rate per mille of population protected was 32·19 against 28·91 for last year. Each vaccinator, on an average, vaccinated 1,499 persons. The total cost was Rs. 8,891-10-10, or annas 3-4 per each successful case against annas 3-5 last year. In 10 dispensaries—6 in the Sángli States and 4 at Rámdurg, Mudhol, Miraj and Budgaon —2,108 persons were primarily vaccinated and 73 were re-vaccinated.

Progress in the Eastern Gujarát Registration District.

74. The Eastern Gujarát Registration District comprises the Collectorates of Surat, Broach, Kaira, Panch Maháls and Ahmedabad and the Native States of Mahi Kántha, Rewa Kántha, Cambay, the Surat Agency and Jámbughoda. It has a population of 4,162,314 persons and an area of 27,712·075 square miles. It was administered by a Deputy Sanitary Commissioner, who had under his orders 5 Inspectors of Sanitation and Vaccination, 2 clerks, 7 municipal, 41 local fund, 4 candidate and 24 Native State vaccinators, and 82 peons. The area for each vaccinator was 384·890 square miles, with a population of 57,810. Eight more vaccinators are required—4 for town circles, 1 for a rural circle and 3 for the

Native States of Lúnáváda, Sunth and Kadána. Out of 130,116 primary vaccinations and 1,925 re-vaccinations there were 126,638 or 97·36, and 1,212 or 62·96 per cent., successful. Last year the numbers primarily vaccinated and re-vaccinated were respectively 120,954 and 2,223. The protected were 30·72 per mille of population: last year they were 28·47. Each vaccinator vaccinated 1,834 persons. The total expenditure was Rs. 39,991-13-4, and the average cost per each successful case was annas 5, whilst last year it was annas 5-2. In 13 dispensaries 2,291 persons were primarily vaccinated and 40 were re-vaccinated. The deaths from small-pox were 124 against 426 last year.

Surat Collectorate.

75. In the Collectorate of Surat there are 11 vaccinators, but 1 more is required for Bulsár Town. Each vaccinator had, on an average, a population of 55,836 persons and an area of 151·1 square miles. The number of persons primarily vaccinated was 19,232, and the successful cases were 18,571 or 96·56 per cent. The number of persons re-vaccinated was 125, and the successful cases were 55, or 44·00 per cent. Protection was afforded to 30·33 out of every 1,000 of population: last year the rate was 26·80. Each vaccinator, on an average, operated on 1,760 persons. The total cost was Rs. 3,502-15-4, and the average cost per each successful case was annas 3, whilst in the preceding year it was annas 3-3. In 4 dispensaries 897 persons were primarily vaccinated and 10 were re-vaccinated. There were no deaths from small-pox, whilst last year there were 49.

Broach Collectorate.

76. In the Collectorate of Broach there are 6 vaccinators. Two additional vaccinators are wanted for the town of Jambusar and for the Hánsot Petha. Each vaccinator had, on an average, a population of 54,488 persons and an area of 242·2 square miles. The primarily vaccinated were 9,029 and the re-vaccinated were 636. Of these the successful cases were 8,639 and 388 respectively, or 95·68 and 61·01 per cent. The rate of protection per 1,000 was 27·61 against 32·56 last year. Each vaccinator vaccinated 1,611 persons, and the average cost per each successful case was annas 3-5 calculated on the total cost of Rs. 1,917-13-10: last year each successful case cost annas 2-10. In the dispensary at Elao 79 persons were primarily vaccinated, but there were no re-vaccinations. There were 4 deaths from small-pox, whilst last year there were 8.

Kaira Collectorate.

77. In the Kaira Collectorate there are 11 vaccinators. Each vaccinator had, on an average, a population of 73,164 persons and an area of 146·2 square miles. Out of 24,701 persons primarily vaccinated and 112 re-vaccinated, 24,152 or 97·78, and 66 or 58·93 per cent., were successfully operated on. The protected were 30·09, and in 1884-85 they were 28·19 per 1,000 of population. Each vaccinator, on an average, vaccinated 2,256 persons. The total cost amounted to Rs. 3,420-9-10, or annas 2-3 per each successful case, the same as last year. In 4 dispensaries there were 783 persons primarily vaccinated and none were re-vaccinated. There were 87 deaths from small-pox: last year there were 156.

Panch Maháls.

78. In the Panch Maháls there are 6 vaccinators, and an additional one is required for the town of Dohad. Each vaccinator had, on an average, a population of 42,580 persons and an area of 268·9 square miles. There were 9,898 primary vaccinations and 502 re-vaccinations. Of these the successful were 9,582 and 340, or 96·81 and 67·73 per cent. The rate of protection per mille of population was 38·84, and in the preceding year it was 36·15. Each vaccinator vaccinated 1,733 persons. The total expenditure was Rs. 1,901-4-6, or annas 3-0, the same as last year. There were 35 deaths from small-pox last year, whilst this year there were 19 deaths.

Ahmedabad Collectorate.

79. In the Ahmedabad Collectorate there are 14 vaccinators, but another is wanted for the town of Gogha. Each vaccinator had, on an average, a population of 61,166 persons and an area of 272·9 square miles. There were 27,553 persons primarily vaccinated and 301 re-vaccinated. The successful cases were 26,938 and 181, or 97·77 and 60·13 per cent. The rate of protection per mille of population was 31·67 against 32·26 in the previous year. Each vaccinator vaccinated 1,990 persons. The

total cost was Rs. 4,318-6-5. The average cost per successful case was annas 2-7, or 2 pies more than in the year 1884-85. In 2 dispensaries 144 persons were primarily vaccinated, but there were no re-vaccinations. There were 14 deaths from small-pox, whilst last year there were 178.

Native States in the Eastern Gujarát Registration District.

80. The States of Mahi Kántha, Rewa Kántha, Cambay, the Surat Agency and Jámbughoda have a collective area of 17,368 square miles and a population of 1,282,422 persons. In Sachín and Jámbughoda States vaccination is performed in the former by the vaccinator of the Chorási Táluka of the Surat Zilla, and in the latter by the vaccinator of Hálol, Panch Maháls. There were 24 vaccinators employed in all these States, Mahi Kántha having now 8 instead of 5 vaccinators, but 3 more are required—1 in each of the States of Lúnáváda, Sunth and Kadána. The number of primarily vaccinated was 39,258 and that of re-vaccinated was 245; of these 38,330 and 179, or 97·64 and 73·06 per cent., were successfully operated on. Protection was afforded to 30·03 per mille of population: last year the rate was 24·55. Each vaccinator, on an average, operated on 1,646 persons. The local-fund vaccinators in Sachín and Jámbughoda vaccinated 445 and 4 persons under each kind of operation; of these 426 or 95·73 and 3 or 75·00 per cent. were successfully operated on. Protection was afforded to 19·36 persons per 1,000 of population against 16·20 in the preceding year. The total cost in all the States was Rs. 6,093-10-1, or annas 2-6 against annas 2-8 last year per each successful case. The Medical Officer of the Lúnáváda Dispensary in Rewa Kántha States primarily vaccinated 195 persons and re-vaccinated 3, whilst the Medical Officer of the Sádra Dispensary in Mahi Kántha States primarily vaccinated 193 persons and re-vaccinated 27.

Progress in the Western Gujarát Circle.

81. The Western Gujarát Circle comprises the Native States of Káthiáwár and Pálanpur. It has an area of 27,256·48 square miles and a population of 2,920,377 persons. It was administered by a Superintendent of Vaccination, who had under his orders 2 Assistant Superintendents, 2 clerks, 2 Government and 42 Native State vaccinators and 50 peons. The average number of square miles for each vaccinator was 619·47 and the average population of his area 66,372. Vaccination was carried on in 14 dispensaries. Two more vaccinators and 1 candidate are still required in the States of Pálanpur, but it is stated that they, as also an Assistant Superintendent of Vaccination, have been lately sanctioned by the Political Superintendent. The number of primary vaccinations and re-vaccinations were respectively 102,967 and 18,803 against 98,787 and 25,159 in the preceding year. The successful cases were 94,363 and 12,240, their percentages being 91·64 and 65·10. The rate of protection was 36·50 per 1,000 of population: last year it was 36·00. Each vaccinator vaccinated 2,832 persons. The total cost was Rs. 29,467-5-9, or annas 4-5 per each successful case. In the preceding year it was annas 4-7. In dispensaries there were primarily vaccinated 1,897 persons, and 119 were re-vaccinated.

Province of Káthiáwár.

82. The States of Káthiáwár have a collective area of 19,256·48 square miles and a population of 2,343,899 persons. There were 37 vaccinators, who primarily vaccinated 83,836 persons and re-vaccinated 17,403. The successful cases were 76,149 and 11,195, or 90·83 and 64·33 per cent. Protection was afforded to 37·26 per 1,000 of population against 37·03 last year. The average per each vaccinator was 2,812 operations, and the average cost per each successful case was annas 2-8, or 2 pies less than last year, calculated on the total cost of Rs. 14,478-9-7. In 14 dispensaries 1,897 persons were primarily vaccinated and 119 re-vaccinated.

Pálanpur States.

83. The Pálanpur States have an area of 6,041 square miles and a population of 576,478 persons. There were 7 vaccinators, and 2 more are required, as also a candidate vaccinator. This increase together with an Assistant Superintendent of Vaccination has, it is stated, been lately sanctioned by the Political Superintendent. The number of persons primarily vaccinated was 19,131 and that of the re-vaccinated was 1,400. The successful cases were 18,214 and 1,045, or 95·21 and 74·64 per cent. The rate of protection per mille of population was 33·41 against 31·80 in the preceding year. The average work per each vaccinator was 2,933 persons. The total

cost was Rs. 2,034-12-6, or annas 1-8 per each successful case: last year it was annas 1-9.

Progress in the Sind Registration District.

84. The Sind Registration District comprises the Collectorates of Karáchi, Hyderabad and Shikárpur, the Thar and Párkar, the Upper Sind Frontier and the Khairpur State. It has an area of 54,123·01 square miles and a population of 2,542,976. It was administered by a Deputy Sanitary Commissioner, who had under his orders 1 Superintendent of Vaccination, 6 Inspectors of Sanitation and Vaccination, 2 clerks, 7 municipal, 50 local fund, 5 candidate and 3 Native State vaccinators and 68 peons. Three more are required for the rural circles in the Karáchi Collectorate and 1 in the Khairpur State. Vaccination was carried on in 16 dispensaries. Each vaccinator had an area of 902·05 square miles, with a population of 42,383 persons. Those primarily vaccinated numbered 87,402, and the re-vaccinated were 18,407, against 82,159 and 18,751 in the preceding year. The successful cases were respectively 84,470 and 12,846. The rates of success were 96·65 and 69·79 per cent., and that of protection was 38·27 per 1,000 of population. It was 35·32 last year. Each vaccinator on an average vaccinated 1,763 persons. The total cost was Rs. 44,289-0-2, and for each successful case it was annas 7-3, or 7 pies less than last year. There were 1,044 persons primarily vaccinated and 237 re-vaccinated by Medical Officers of 16 dispensaries. There were 330 deaths from small-pox against 869 in the previous year.

Karáchi Collectorate.

85. In the Karáchi Collectorate there are 12 vaccinators, but 3 more are required, so as to have 1 for each rural circle. Each vaccinator had, on an average, a population of 39,891 persons and an area of 1,176·28 square miles. The number primarily vaccinated was 16,499 and the re-vaccinated were 3,509. The successful cases were respectively 16,133 and 2,415 or 97·78 and 68·82 per cent., whilst 38·75 per 1,000 of population were protected: last year the rate was 36·32. Each vaccinator vaccinated 1,667 persons. The total cost was Rs. 4,452-13-8, or annas 3-10 per each successful case, the same as last year. In 5 dispensaries 358 persons were primarily vaccinated and 34 were re-vaccinated. The deaths from small-pox were 115 against 297 in the previous year.

Hyderabad Collectorate.

86. In the Hyderabad Collectorate there are 14 vaccinators, each of whom had, on an average, a population of 53,902 persons and an area of 644·97 square miles. There were 22,349 persons primarily vaccinated and 1,816 re-vaccinated; of these 21,497 or 96·19 and 1,250 or 68·83 per cent. were successfully operated on. The rate of protection per mille of population was 30·14: last year it was 27·01. Each vaccinator, on an average, vaccinated 1,726 persons. The total cost amounted to Rs. 5,360-7-1, which gives annas 3-9 as the cost per each successful case, or 1 pie less than last year. In 6 dispensaries 241 persons were primarily vaccinated and only 1 person was re-vaccinated. There were 61 deaths from small-pox against 477 in the preceding year.

Thar and Párkar.

87. In the Thar and Párkar there are 7 vaccinators, each of whom had, on an average, a population of 29,049 persons and an area of 1,818 square miles. They primarily vaccinated 9,975 and re-vaccinated 2,885 persons. The successful cases were 9,833 or 98·58 and 2,246 or 77·85 per cent. The protected were 59·40 per 1,000 against 53·71 in the preceding year. Each vaccinator, on an average, vaccinated 1,837 persons. The total cost was Rs. 2,759-6-6, or annas 3-8 per successful case: last year it was annas 3-5. In 3 dispensaries 59 persons were primarily vaccinated and 4 were re-vaccinated. There were 8 deaths from small-pox and last year there were 30.

Shikárpur Collectorate.

88. In the Shikárpur Collectorate there are 20 vaccinators, each of whom has, on an average, a population of 41,731 persons and an area of 490·46 square miles. They primarily vaccinated 28,337 and re-vaccinated 7,416 persons. The successful cases were 27,179 or 95·91, and 5,059 or 68·22 per cent. The protected were 38·63 per mille of population against 37·08 in the preceding year. Each vaccinator vaccinated 1,788 persons. The total cost was Rs. 7,154-9-3 or annas 3-7 per each

successful case, the same as last year. In 3 dispensaries there were 386 persons primarily vaccinated and 198 re-vaccinated. There were 117 deaths from small-pox against 51 last year.

Upper Sind Frontier.

89. In the Upper Sind Frontier there are 4 vaccinators, each of whom has, on an average, a population of 35,636 persons and an area of 582·71 square miles. They primarily vaccinated 5,654 persons and re-vaccinated 2,648. The successful cases were 5,366 and 1,785 or 94·91 and 67·41 per cent. The rate of protection per mille of population was 50·17, and last year it was 47·26. The average number of operations for each vaccinator was 2,075, and the cost of each successful case was, like the preceding year, annas 3-8, calculated on the total cost of Rs. 1,624-12-2. There were 29 deaths from small-pox this year: last year there were 14.

Khairpur State.

90. The Khairpur State has an area of 6,109 square miles and a population of 129,153 persons. It has 3 vaccinators, but 1 more is required. They primarily vaccinated 4,588 and re-vaccinated 133 persons; of these 4,462 or 97·25 and 91 or 68·42 per cent. were successfully operated on. The protected were 35·25 per mille of population: last year they were 26·60. Each vaccinator, on an average, vaccinated 1,574 persons. The total cost was Rs. 1,317, or annas 4-8 per each successful case against annas 6-2 in 1884-85.

Progress in the Baroda Circle.

91. The States of Baroda have a population of 2,185,005 persons and an area of 8,570 square miles. It was administered by the Chief Medical Officer employed by the Darbár, who had under his orders 3 Inspectors, 31 vaccinators and 34 peons. Each vaccinator has, on an average, 276 square miles and a population of 70,484. There were 65,991 persons primarily vaccinated and 2,068 re-vaccinated against 64,547 and 283 in 1884-85. The successful cases were 63,502 and 1,736, or 96·23 and 83·95 per cent. The rate of protection per mille of population was 29·86: last year it was 28·30. Each vaccinator vaccinated 2,195 persons. The total cost was Rs. 12,162-7-5, or annas 3 per each successful case against annas 3-1 in 1884-85. Vaccinations were performed in 20 dispensaries, whilst last year it was carried on in 22. In these dispensaries 2,028 persons were primarily vaccinated and only 2 were re-vaccinated.

Progress in the Cutch Circle.

92. The State of Cutch has a population of 512,084 persons in an area of 6,500 square miles. It was administered by the Medical Officer to H. H. the Ráo of Cutch, who had under his orders an Assistant Superintendent of Vaccination, 17 vaccinators and 19 peons. Each vaccinator has an average population of 30,123 and an area of 382 square miles. The number of persons primarily vaccinated was 20,919 and that of the re-vaccinated was 196 against 20,486 and 188 last year. The successful cases were 20,710 and 140, or 99·00 and 71·43 per cent. The rate of protection per mille of population was 40·72: last year it was 40·00. Each vaccinator operated, on an average, on 1,242 persons. The total expenditure was Rs. 7,251-3-8, and the average cost per each successful case was annas 5-7: in the preceding year it was annas 6.

Progress in Aden.

93. Aden has an area of 11·6 square miles and a population of 34,860 persons. The municipality defrays the cost of 1 vaccinator and 1 peon. This vaccinator works under the supervision of the Civil Surgeon. There were 610 persons primarily vaccinated against 411 in the preceding year. There were no re-vaccinations this year, whilst last year only 1 person was re-vaccinated. Of the primary vaccinations 583, or 95·57 per cent., were successful. The rate of protection afforded was 16·72 per 1,000 of population: last year it was 9·41. The total cost was Rs. 420 and the average cost per each successful case was annas 11-6: in the preceding year it was Re. 1-4-2. In the dispensary of Shaik Othman 183 persons were primarily vaccinated.

Progress in Khelát, Muskat and Bushire.

94. A vaccinator was deputed to perform vaccination in Khelát for four months like last year. He primarily vaccinated 635 and re-vaccinated 12 persons. Of the primary vaccinations 614 or 96·69 per cent. were successful. All the

re-vaccinations were also successful. There were only 23 primary vaccinations in Muskat against 63 in the preceding year. The successful cases were 22 or 95·65 per cent. There were no re-vaccinations. In the Residency Dispensary, Bushire, there were 187 persons primarily vaccinated against 6 in 1884-85. Of these cases 149 were successful, or 79·68 per cent.

Tour of Deputy Sanitary Commissioners and Superintendent of Vaccination.

95. *(a).* In the Western Registration District the Deputy Sanitary Commissioner went through the tálukás of Násik, Niphád, Dindori, Penth, Chándvad and Kalvan in Násik; the tálukás of Sálsette, Kalyán, Karjat, Bhiwndi, Váda, Murbád and Sháhápur in Thána, and the táluka of Panvel in the Collectorate of Kolába. The only Native State that he passed through was Jawhár. He travelled over 1,606 miles in 89 days, visited 124 villages, and inspected 4,660 children.

(b). In the Central Registration District the Deputy Sanitary Commissioner went through the tálukás of Nagar, Jámkhed, Párner, Shrigonda and Karjat in Ahmednagar; the tálukás of Haveli, Maval, Bhimthadi and Sirúr in Poona; the Pandharpur Táluka in Sholápur; and the tálukás of Sátára, Javli, Wái and Koregaon in Sátára. The only Native State that he passed through was Phaltan. The total number of children inspected was 4,053 in 136 villages. The number of miles travelled was 2,122 in 64 days. His tour was much interrupted by his having been called into Poona in order to make a special enquiry regarding an outbreak of cholera.

(c). The Deputy Sanitary Commissioner of the Southern Registration District passed through all the tálukás of Belgaum; the tálukás of Dhárwár, Navalgund, Bankápur, Hángal, Hubli and Kalghatgi in Dhárwár; the tálukás of Indi and Bádámi in Bijápur; and the tálukás of Sirsi, Yellápur, Siddápur and Haliyál in Kánara Zilla. He passed through the Native State of Yellur. He inspected 7,241 children in 180 villages. The number of miles travelled was 2,618 in 148 days.

(d). The Deputy Sanitary Commissioner in the Eastern Gujarát Registration District went through the tálukás of Chorási, Mándvi, Bárdoli, Bulsár, Párdi and Olpád in Surat; all the tálukás of Broach except Jambusar; and all the tálukás of Kaira except Borsad and Thásra. He also went through the Native States of Cambay and Watrak Kántha in Mahi Kántha. He travelled over 2,001 miles in 146 days, and saw 7,405 children in 297 villages.

(e). In the Western Gujarát Circle the Superintendent of Vaccination went through the States of Limbdi, Wadhwán, Sayla and Vánkáner in the Jhálávád Pránt; the States of Rájkot, Dhoráji and Upleta in the Hálár Pránt; the States of Junágad, Bagásra, Mánikwáda, Bilka and Jetpur in Sorath Pránt; and all the States of Gohelvád Pránt except Mahuwa. He travelled over 1,175 miles in 76 days and inspected 14,449 children in 120 villages.

(f). In Sind the Deputy Sanitary Commissioner went through the tálukás of Ghorábári, Jati, Tatta, Sujával, Mirpur Sákro, Sháhbandar, Mirpur Batoro, Kotri and Karáchi Town of the Karáchi Collectorate; the tálukás of Hyderabad, Tando and Dero Mohbat in Hyderabad; all the tálukás of Shikárpur except Tigar and Saidpur, and all the tálukás of Upper Sind Frontier except Shahdádpur. He also passed through the Khairpur State. He inspected 7,363 children in 284 villages, and travelled over 1,932 miles in 149 days. The 5 Deputy Sanitary Commissioners and the Superintendent of Vaccination have visited all the districts except Khándesh, Ratnágiri, Panch Maháls, Ahmedabad and Thar and Párkar. The Native States that were not visited this year are Khándesh Agency, Janjira, Akalkot, Modnimb, Sátára Jághírs except Phaltan, Sávantvádi, Southern Marátha Jághírs except Yellur, Rewa Kántha, Mahi Kántha except Watrak Kántha, Bánsda, Dharampor, Sachín, Jámbughoda and Pálanpur. There were collectively 242 encampments, 672 travelling days, 11,454 miles travelled, 1,141 villages visited, and 45,171 children inspected.

The Bombay Vaccination Act No. I. of 1877.

96. The compulsory Vaccination Act (I. of 1877) has been in force for 8 years, and it is worked fairly well. The following table shows the progress in the infants protected during the last 10 years, the first 2 being before, and the last 8 after, the introduction of the Act:—

Years.		Births returned as having been registered.	Deaths registered among Children under 1 year old.	Children available for Vaccination.		Children under 1 year successfully vaccinated.		
				Births *minus* Deaths.	At the rate of 31 per 1,000 of Population.	Number.	Ratio per 100 on those in Column 4.	Ratio per 100 on those in Column 5.
Before the introduction of the Act	1876-77	13,466	6,179	7,287	19,977	9,840	135·03	49·26
	1877-78	13,720	7,781	5,939	19,977	7,212	121·43	36·10
After the introduction of the Act.	1878-79	13,896	6,417	7,479	19,977	6,558	87·69	32·83
	1879-80	14,341	5,274	9,067	19,977	7,825	86·30	39·17
	1880-81	16,997	6,104	10,893	19,977	10,416	95·62	52·14
	1881-82	16,381	6,279	10,102	23,969	12,017	118·96	50·14
	1882-83	15,094	5,720	9,374	23,969	14,940	159·38	62·33
	1883-84	14,932	6,514	8,418	23,969	12,331	146·48	51·45
	1884-85	14,377	6,340	8,037	23,969	13,449	167·34	56·11
	1885-86	14,685	6,265	8,420	23,969	13,547	160·89	56·52

Karáchi Vaccination Act.

97. This is the sixth complete year in which the Karáchi Vaccination Act (No. IV. of 1879) has been worked in that city, and it will be seen from the following table that great improvement has been effected in the number of infants protected:—

Years.	Births returned as having been registered.	Deaths registered among Children under 1 year old.	Children available for Vaccination.		Children under 1 year successfully vaccinated.		
			Births *minus* Deaths.	At the Rate of 31 per 1,000 of Population.	Number.	Ratio per 100 on those in Column 4.	Ratio per 100 on those in Column 5.
1880-81...	1,878	309	1,569	2,118	1,917	122·18	90·51
1881-82...	2,405	489	1,916	2,118	2,516	131·32	118·79
1882-83...	2,985	514	2,471	2,118	2,827	114·41	133·47
1883-84...	3,273	728	2,545	2,118	2,683	105·42	126·68
1884-85...	3,189	706	2,483	2,118	3,003	120·94	141·78
1885-86...	3,056	635	2,421	2,118	3,084	127·39	145·61

Suggestions for the more effectual spread of vaccination.

98. The Deputy Sanitary Commissioner, Western Registration District, suggests the introduction of animal vaccination in some of the large towns of the district in which great difficulty exists to keep up the lymph supply, as people generally object to allow lymph to be taken from ripe vesicles. Heifers may be inoculated for a fortnight or month every year, and as the cost would be very little, the Local Boards will, it is hoped, consent to adopt this method, as it would add greatly to the efficiency and progress of vaccination.

Dr. Channer, the Deputy Sanitary Commissioner, Southern Registration District, suggests that the Native States of Kolhápur, Southern Marátha Jághírs and Savanúr should be placed under a commissioned Medical Officer, as it is simply impossible for this Department to supervise the work properly with its limited staff, which should be supplemented by 2 additional inspectors. In the Kánara Collectorate 1 more candidate vaccinator is required to carry on

the work of the vaccinators, who often get sick owing to the unhealthy climate. He recommends that vaccinators should get batta, at the rate of 2 annas a day, to defray the expenses of keeping a pony, which they are obliged to incur owing to their peregrinating duties, and that the pay of the candidate vaccinators should be increased to attract respectable and good men to the Department.

He also suggests that "the Mámlatdárs be particularly requested to watch carefully the progress of vaccination in their several tálukás, and, above all, see that the children are collected by the pátels when the vaccinator arrives at a village for vaccination work."

As regards re-vaccinations he says: "I think, if orders could be issued directing that all children just before they finally leave school should be re-vaccinated, much good would result."

The Superintendent of Vaccination, Western Gujarát Circle, reports his having received a letter from the Political Superintendent, Pálanpur States, informing him that the Chiefs have agreed to establish a State vaccination fund to be paid by States according to their population, from which the requisite number of vaccinators and peons will be entertained on proper salaries, whilst their work will be under the immediate supervision of an Assistant Superintendent of Vaccination. Thus the long-felt want will be removed, and vaccination in the Pálanpur States will be much improved.

APPENDICES.

GENERAL POPULATION AND VITAL STATISTICS.

ANNUAL FORM NO. I.—BIRTHS *registered in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1885.*

1	2	3	4			5			6	7	8
No.	Districts.	Population according to Census of 1881.	NUMBER OF BIRTHS REGISTERED.			RATIO OF BIRTHS PER 1,000 OF POPULATION.			Number of Males born to every 100 Females born.	Excess of Births over Deaths per 1,000 of Population.	Excess of Deaths over Births per 1,000 of Population.
			Male.	Female.	Total.	Male.	Female.	Total.			
	Western Registration District.										
1	Khándesh	1,237,231	25,252	23,343	48,595	20·41	18·87	39·28	108·18	9·91	....
2	Násik	781,206	15,490	14,457	29,947	19·83	18·51	38·33	107·15	0·88	....
3	Thána	807,357	11,540	11,019	22,559	14·29	13·65	27·94	104·73	1·02	....
4	City of Bombay	778,196	7,618	7,012	14,625	9·84	9·15	18·99	107·65	....	8·90
5	Kolába	482,830	6,956	6,527	13,483	14·41	13·51	27·92	106·57	6·23	....
	Central Registration District.										
6	Ahmednagar	751,228	16,799	15,645	32,444	22·36	20·83	43·19	107·38	9·07	....
7	Poona	900,621	17,176	15,738	32,914	19·07	17·47	36·54	109·14	3·19	....
8	Sholápur	882,487	13,256	12,582	25,838	22·76	21·60	44·36	105·36	7·67	....
9	Sátára	1,062,250	24,818	23,649	48,467	23·36	22·26	45·62	104·94	10·83	....
10	Ratnágiri	997,000	12,750	11,426	24,175	12·79	11·46	24·25	111·60	9·55	....
	Southern Registration District.										
11	Belgaum	864,014	19,533	18,416	37,949	22·61	21·31	43·92	106·06	11·02	....
12	Dhárwár	882,907	21,502	20,699	42,201	24·35	23·44	47·80	103·88	15·15	....
13	Bijápur	638,493	14,532	14,039	28,571	22·76	21·99	44·75	103·51	19·51	....
14	Kánara..	421,840	6,367	6,229	12,596	15·09	14·77	29·86	102·21	....	0·99
	Eastern Gujarát Registration District.										
15	Surat	614,198	11,737	11,294	23,031	19·11	18·39	37·49	103·92	8·10	....
16	Broach	336,930	6,378	6,081	12,459	19·51	18·60	38·11	104·88	9·21	....
17	Kaira	804,800	16,331	14,896	31,227	20·37	18·51	38·87	110·04	4·42	....
18	Panch Mahále	255,479	5,029	4,968	9,997	19·92	19·21	39·13	103·69	17·69	....
19	Ahmedabad	856,324	17,157	15,317	32,474	20·04	17·89	37·92	112·01	4·41	....
	Sind Registration District.										
20	Karáchi	478,688	5,909	4,459	10,368	12·34	9·32	21·66	132·52	....	4·89
21	Hyderabad	754,924	8,168	5,685	13,853	10·82	7·54	18·36	143·68	....	1·49
22	Thar and Párkar	203,344	3,774	2,897	6,671	18·56	14·25	32·81	130·27	18·20	....
23	Shikárpur	382,996	9,225	7,007	16,232	10·81	8·21	19·03	131·65	1·39	....
24	Upper Sind Frontier	124,181	994	641	1,635	8·00	5·16	13·17	155·07	....	2·12
	Total for the Presidency ..	16,454,414	298,406	274,025	572,431	18·14	16·65	34·79	108·90	6·01	....

ANNUAL FORM NO. II.—DEATHS *registered in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1885.*

1	2	3	4	5			6	7			8		
No.	Districts.	Area in square miles.	Average Population per square mile.	NUMBER OF DEATHS REGISTERED.			Number of Males died to every 100 deaths of Females.	RATIO OF DEATHS PER 1,000 OF POPULATION.			MEAN RATIO OF DEATHS PER 1,000 DURING PREVIOUS FIVE YEARS.		
				Male.	Female.	Total.		Male.	Female.	Total.	Male.	Female.	Total.
	Western Registration District.												
1	Khándesh	9,944	124·42	19,354	16,985	36,339	113·95	30·60	28·08	29·37	27·27	25·09	26·21
2	Násik	5,940	131·51	15,310	13,071	29,281	109·38	38·52	34·40	37·47	27·06	25·06	26·05
3	Thána	3,936	205·12	11,329	10,407	21,736	108·86	27·23	26·52	26·92	22·48	22·18	22·33
4	City of Bombay	22	35,145·27	11,223	10,328	21,551	108·76	24·17	23·43	27·89	25·22	34·49	29·06
5	Kolába	1,811	266·61	5,454	5,018	10,472	108·69	22·34	21·62	21·69	22·39	19·76	21·09
	Central Registration District.												
6	Ahmednagar	6,666	112·69	12,394	12,239	25,633	109·44	35·10	33·11	34·12	27·06	25·17	26·11
7	Poona	5,348	168·40	15,557	14,476	30,033	107·49	34·18	32·49	33·35	22·39	20·68	21·53
8	Sholápur	4,521	128·84	11,074	10,295	21,369	107·57	37·56	35·79	36·69	23·07	21·77	22·72
9	Sátára	4,988	212·98	18,786	18,182	36,968	103·32	36·23	34·32	34·80	23·32	22·60	22·96
10	Ratnágiri	3,922	254·22	7,582	7,071	14,653	107·22	16·03	13·49	14·70	18·03	14·30	16·17
	Southern Registration District.												
11	Belgaum	4,657	185·53	14,201	13,445	27,646	105·62	32·68	31·20	32·00	27·49	25·72	26·63
12	Dhárwár	4,533	194·68	14,627	14,202	28,829	102·99	33·09	32·21	32·65	27·34	26·37	26·87
13	Bijápur	3,757	110·99	8,138	7,984	16,120	101·93	25·02	24·88	25·24	23·27	21·76	22·57
14	Kánara	3,011	107·85	6,773	6,241	13,014	108·52	21·37	21·29	30·83	28·26	28·19	28·23
	Eastern Gujarát Registration District.												
15	Surat	1,662	369·55	9,217	8,838	18,055	104·32	30·11	28·66	29·39	29·16	27·54	28·35
16	Broach..	1,453	225·00	6,421	5,901	12,322	109·98	28·53	31·24	37·40	31·38	28·53	30·15
17	Kaira	1,669	500·18	14,597	12,831	27,428	116·10	34·91	33·54	34·45	28·10	27·20	27·68
18	Panch Mahále	1,613	158·38	2,911	2,566	5,477	113·44	22·19	20·64	21·44	17·70	16·45	17·10
19	Ahmedabad	3,821	224·10	15,359	13,339	28,698	115·14	34·95	31·99	33·51	28·55	26·19	27·40
	Sind Registration District.												
20	Karáchi	14,115	33·91	7,212	5,500	12,712	131·13	27·11	25·86	26·53	16·78	16·37	16·60
21	Hyderabad	9,030	83·57	8,516	6,485	14,975	131·43	29·90	18·61	19·85	14·18	13·84	13·97
22	Thar and Párkar	17,729	15·88	1,722	1,229	2,951	140·11	15·32	13·51	14·51	16·21	15·86	16·04
23	Shikárpur	10,001	85·29	8,599	6,463	15,053	132·91	18·63	16·40	17·64	15·04	14·59	14·82
24	Upper Sind Frontier	2,139	58·05	1,110	789	1,899	140·68	15·82	14·61	15·29	10·13	9·20	9·67
	Total for the Presidency ..	124,130	132·56	248,829	224,762	473,591	110·71	29·28	28·25	28·78	23·46	22·37	22·93

N.B.—Those born dead are not included in this or any of the other statements.

Annual Form No. III.—DEATHS *registered in the* Districts *of the* Bombay Presidency *during the months of the year 1885.*

1	2	3												4	5
No.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total Deaths registered during the year.	No.
	Western Registration District.														
1	Khándesh	2,041	2,346	2,462	2,380	2,556	2,599	3,565	3,764	4,406	4,165	3,219	2,936	36,339	1
2	Násik	1,456	1,673	1,784	1,518	2,074	2,739	3,264	3,952	3,141	3,286	2,454	1,990	29,281	2
3	Thána	2,689	2,041	1,886	1,323	1,435	1,863	1,543	1,964	1,942	1,506	1,611	1,933	21,736	3
4	City of Bombay..	1,769	1,863	2,040	1,996	1,811	1,734	1,779	1,852	1,758	1,696	1,576	1,749	21,561	4
5	Kolába	969	1,079	1,050	661	829	1,120	824	783	710	713	752	962	10,472	5
	Central Registration District.														
6	Ahmednagar	1,354	1,267	1,296	1,484	1,824	1,923	2,964	3,432	2,873	2,993	2,359	1,854	25,623	6
7	Poona	1,738	1,709	1,993	1,674	1,718	2,210	3,366	4,148	3,064	3,215	2,515	2,164	30,033	7
8	Sholápur	1,011	924	982	876	1,088	1,158	2,835	2,765	2,200	2,990	2,608	1,873	21,369	8
9	Sátára	2,104	1,804	1,901	1,777	2,156	2,271	4,647	5,529	4,194	4,621	3,298	2,656	36,968	9
10	Ratnágiri..	1,319	1,301	1,261	1,173	1,067	1,032	1,214	1,407	1,213	1,131	1,203	1,312	14,663	10
	Southern Registration District.														
11	Belgaum	1,778	1,554	1,817	1,914	2,566	4,215	2,899	2,558	1,944	1,842	1,863	1,686	27,646	11
12	Dhárwár	2,148	1,960	2,251	2,379	2,773	2,987	2,914	2,624	2,010	2,092	2,291	2,400	28,829	12
13	Bijápur	882	781	852	951	1,097	1,315	1,796	1,848	1,596	1,951	1,778	1,273	16,120	13
14	Kánara	1,188	1,108	1,192	1,044	1,157	1,060	1,083	1,089	937	957	1,061	1,133	13,014	14
	Eastern Gujarát Registration District.														
15	Surat	1,505	1,492	1,551	1,423	1,475	1,489	1,283	1,520	1,488	1,566	1,683	1,530	18,052	15
16	Broach	948	891	995	993	863	903	924	1,197	1,277	1,276	1,162	1,113	12,392	16
17	Kaira	1,643	1,605	1,947	2,068	2,229	2,683	2,730	3,066	2,853	2,750	2,255	1,699	27,728	17
18	Panch Mahále	411	401	494	422	435	517	372	454	496	547	533	485	5,477	18
19	Ahmedabad	2,164	2,077	2,651	2,542	2,363	2,146	1,950	2,524	2,690	2,703	2,518	2,365	28,698	19
	Sind Registration District.														
20	Karáchi	853	809	1,005	995	967	2,513	2,268	472	544	633	703	883	12,712	20
21	Hyderabad	1,359	1,609	1,255	970	937	1,912	2,509	656	636	901	1,302	1,486	14,935	21
22	Thar and Párkar	383	283	262	278	251	236	268	160	195	176	267	244	2,951	22
23	Shikárpur	1,319	902	958	785	828	2,379	2,980	720	701	1,138	1,209	1,136	15,053	23
24	Upper Sind Frontier	156	72	108	84	97	286	383	273	78	94	157	131	1,809	24
	Total for the Presidency ..	33,187	30,842	33,703	31,527	35,647	43,317	50,348	48,757	42,946	45,542	40,507	37,268	473,591	
	Ratio of deaths per 1,000 in each month	2·02	1·87	2·05	1·92	2·17	2·63	3·06	2·96	2·61	2·77	2·46	2·26	28·78	

Annual Form No. IV.—DEATHS *registered according to Age in the* Districts *of the* Bombay Presidency *during the year 1885.*

1	2	3		4		5		6		7		8		9		10		11		12		13
No.	Districts.	Under 1 year.		1 year and under 5.		5 and under 10.		10 and under 15.		15 and under 20.		20 and under 30.		30 and under 40.		40 and under 50.		50 and under 60.		60 and upwards.		No.
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
	Western Registration District.																					
1	Khándesh	4,506	3,721	4,488	4,137	836	705	474	397	385	611	1,217	1,614	1,526	1,314	1,693	1,005	1,765	1,238	2,463	2,252	1
2	Násik	3,221	2,670	3,363	3,227	890	783	421	399	368	565	1,185	1,454	1,427	1,246	1,326	954	1,361	1,040	1,778	1,633	2
3	Thána	1,679	1,502	1,970	1,666	833	789	386	319	399	437	1,234	1,331	1,519	1,151	1,234	831	1,026	864	1,028	1,147	3
4	City of Bombay..	3,395	2,899	1,516	1,648	253	325	229	370	476	683	1,430	1,388	1,206	778	968	580	814	652	948	1,045	4
5	Kolába	982	781	932	868	305	259	157	132	176	213	545	644	566	489	574	396	685	588	632	648	5
	Central Registration District.																					
6	Ahmednagar	3,608	2,906	3,060	2,912	590	613	317	315	328	414	847	977	992	891	967	734	1,017	902	1,608	1,676	6
7	Poona	3,188	2,563	3,817	3,322	830	788	361	361	424	647	1,187	1,480	1,345	1,157	1,322	932	1,421	1,224	2,022	2,002	7
8	Sholápur	2,630	2,110	2,881	2,852	527	478	264	256	277	424	854	959	886	791	825	584	836	791	1,064	1,051	8
9	Sátára	4,464	3,687	4,669	5,113	1,229	1,110	467	422	402	520	1,002	1,264	1,189	1,179	1,301	1,045	1,431	1,249	2,490	2,506	9
10	Ratnágiri	845	707	934	828	311	327	198	213	220	240	653	741	783	668	821	602	1,019	862	1,648	1,943	10
	Southern Registration District.																					
11	Belgaum	2,791	2,372	3,297	3,320	1,016	858	544	404	423	440	1,161	1,314	1,283	1,114	1,137	780	963	861	1,584	1,813	11
12	Dhárwár	4,119	3,492	3,247	3,359	735	654	430	321	345	490	1,056	1,491	1,106	1,137	1,047	819	1,083	915	1,458	1,503	12
13	Bijápur	2,008	1,675	2,024	2,014	348	372	259	224	197	274	536	790	592	664	589	478	600	559	863	934	13
14	Kánara	1,382	1,256	749	742	256	288	195	183	217	274	941	1,004	1,001	729	783	500	549	491	700	774	14
	Eastern Gujarát Registration District.																					
15	Surat	2,010	1,693	1,787	1,800	454	457	207	220	222	317	662	833	822	807	832	613	903	678	1,317	1,415	15
16	Broach	1,563	1,512	1,490	1,323	210	201	156	126	129	151	438	468	544	571	664	456	557	434	620	629	16
17	Kaira	3,361	3,370	3,936	3,285	594	428	357	288	263	248	818	809	1,059	893	1,250	811	1,475	931	1,734	1,108	17
18	Panch Mahále	713	571	597	547	123	126	88	70	75	76	204	269	240	217	334	164	229	201	253	225	18
19	Ahmedabad	3,935	3,432	3,737	3,354	592	480	388	310	396	413	1,201	1,069	1,270	1,047	1,313	875	1,326	1,065	1,221	1,324	19
	Sind Registration District.																					
20	Karáchi	1,130	931	625	629	491	434	365	271	339	336	1,196	980	1,137	692	761	404	532	299	636	524	20
21	Hyderabad	1,136	1,055	847	806	493	395	399	267	434	367	1,264	1,049	1,275	864	1,086	504	767	332	809	677	21
22	Thar and Párkar	342	335	162	144	98	47	60	33	71	56	189	142	183	112	196	109	170	66	241	185	22
23	Shikárpur	1,040	997	668	661	553	426	399	232	441	362	1,226	1,096	1,353	984	1,195	599	826	454	889	742	23
24	Upper Sind Frontier	139	95	118	100	85	52	49	26	56	38	149	122	175	135	157	87	73	47	131	89	24
	Total for the Presidency ..	54,365	46,244	50,623	49,016	12,609	11,503	7,141	6,158	7,066	8,594	21,216	23,308	23,450	19,629	22,430	14,924	21,663	16,730	28,326	28,654	
	Ratios per 1,000 living ..	236·83	202·74	60·02	56·29	10·12	10·09	67·10	74·48	10·39	14·15	14·08	15·77	18·02	16·95	27·94	20·15	4,344	33·28	83·48	71·04	

ANNUAL FORM No. V.—DEATHS *registered according to* CLASSES *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1885.*

1	2	3					4					5				
		POPULATION ACCORDING TO CENSUS OF 1881.					NUMBER OF DEATHS REGISTERED.					RATIO OF DEATHS PER 1,000 OF POPULATION.				
No.	Districts.	Mahomedans.	Hindus.	Christians.	Other Classes.	Total.	Mahomedans.	Hindus.	Christians.	Other Classes.	Total.	Mahomedans.	Hindus.	Christians.	Other Classes.	Total.
	Western Registration District.															
1	Khándesh	92,297	1,143,533	1,146	255	1,237,231	2,671	33,562	5	101	36,339	28·94	29·35	4·36	..	29·37
2	Násik	35,294	742,877	2,644	391	781,206	1,176	27,818	23	264	29,281	33·32	37·45	8·70	..	37·47
3	Thána	36,471	728,256	39,059	3,581	807,367	835	19,961	833	107	21,736	22·89	27·41	21·33	29·88	26·92
4	City of Bombay..	168,713	520,069	42,327	52,087	773,196	5,096	14,528	798	1,179	21,561	31·86	27·93	18·85	22·64	27·89
5	Kolába	23,811	455,425	791	2,803	482,830	665	9,724	17	66	10,472	27·93	21·35	21·49	23·55	21·69
	Central Registration District.															
6	Ahmednagar	39,592	706,565	4,821	250	751,228	1,290	24,168	49	126	25,633	32·58	34·20	10·16	..	34·12
7	Poona	42,036	848,811	9,503	2,271	900,621	1,477	23,322	114	120	30,033	35·14	33·45	12·00	52·84	33·35
8	Sholápur	43,997	537,643	625	252	582,487	1,257	20,022	8	82	21,369	28·59	37·24	12·80	..	36·69
9	Sátára	36,712	1,024,626	836	126	1,062,500	1,098	35,618	5	247	36,968	29·91	34·76	5·64	..	34·80
10	Ratnágiri	71,051	922,745	3,275	19	997,090	1,095	13,500	20	38	14,653	15·41	14·63	6·11	..	14·70
	Southern Registration District.															
11	Belgaum	66,262	791,277	6,322	153	864,014	1,990	25,480	108	68	27,646	30·03	32·20	17·08	..	32·00
12	Dhárwár	100,622	770,875	2,356	54	882,907	3,185	25,411	50	174	28,829	31·65	32·96	21·05	..	32·65
13	Bijápur	67,065	570,775	625	27	638,493	1,540	14,493	10	77	16,120	22·96	25·39	15·00	..	25·24
14	Kánara	24,282	382,937	14,509	52	421,840	759	11,871	338	46	13,014	31·26	30·99	23·30	..	30·85
	Eastern Gujarát Registration District.															
15	Surat	55,547	545,370	622	12,659	614,198	1,787	15,993	9	263	18,052	32·17	29·32	14·47	20·77	29·39
16	Broach	67,248	256,505	115	3,062	326,930	2,351	9,932	1	108	12,392	34·96	38·72	8·69	35·27	37·90
17	Kaira	72,954	730,693	1,045	138	804,830	2,499	25,175	36	18	27,728	34·25	34·45	34·45	..	34·45
18	Panch Mahále	21,060	299,336	44	19	255,479	433	5,027	..	17	5,477	26·66	21·03	..	..	21·44
19	Ahmedabad	83,942	769,966	1,520	887	856,324	2,836	25,711	82	59	28,693	34·50	33·39	20·93	66·52	33·51
	Sind Registration District.															
20	Karáchi	393,117	79,819	4,674	1,078	478,688	10,931	2,503	36	142	12,712	25·52	31·36	7·70	..	26·56
21	Hyderabad	621,945	132,199	428	52	754,624	10,944	3,836	1	194	14,975	17·59	29·02	2·34	..	19·84
22	Thar and Párkar	157,634	45,692	14	4	203,344	1,602	1,051	1	237	2,851	10·34	23·00	71·43	..	14·51
23	Shikárpur	690,167	162,004	736	79	852,986	11,302	3,680	3	68	15,053	16·38	22·72	4·08	..	17·64
24	Upper Sind Frontier	110,381	13,558	230	12	124,181	1,333	525	2	19	1,899	12·26	38·72	8·80	..	15·29
	Total for the Presidency ..	3,107,171	13,128,587	138,329	80,330	16,454,414	69,352	397,910	2,508	3,821	473,591	22·36	30·31	18·18	47·57	28·78

N.B.—The deaths in this and all the other statements refer to Natives only, and not to Europeans and Eurasians. Hindus include Hindus of all castes—Jains, Brahmo or Prarthana Samaj, Sikhs, low caste and aboriginals. In the Western, Central, Southern and Gujarát Registration Districts aboriginals are included among Hindus, and in Sind among Mahomedans. "Other Classes" include Jews, Pársis, Buddhists and unspecified.

ANNUAL FORM No. VI.—DEATHS *registered from* DIFFERENT CAUSES *in the* DISTRICTS *and* TOWNS *of the* BOMBAY PRESIDENCY *during the year 1885*

1	2	3	4	5	6	7	8					9	10	11								12
							INJURIES.							RATIO OF DEATHS PER 1,000 OF POPULATION.								
							Suicide.												From all Causes.			
No.	Districts and Towns.	Population according to Census of 1881.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Male.	Female.	Wounding or Accident.	Snake-bite or killed by Wild Beasts.	Total.	All other Causes.	Total Deaths from all Causes.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other Causes.	For the year.	Mean of previous five years.	No.
	A.—DISTRICTS.																					
	Western Registration District.																					
1	Khándesh	1,187,768	1,750	43	26,461	5,593	16	26	162	33	237	1,061	35,150	1·48	0·04	22·28	4·72	0·20	0·89	29·50	26·45	1
2	Násik	732,671	2,322	89	19,145	3,198	10	7	101	15	133	2,191	27,009	3·17	0·10	26·13	4·37	0·18	2·99	36·94	30·28	2
3	Thána	789,001	2,361	101	15,742	517	22	23	199	117	361	1,849	20,571	2·99	0·13	20·19	0·66	0·46	2·37	26·70	22·48	3
4	Kolába	459,299	930	187	7,109	316	5	2	109	41	157	1,381	10,074	2·02	0·41	15·46	0·69	0·34	3·01	21·93	20·99	4
	Central Registration District.																					
5	Ahmednagar	704,940	1,079	27	17,760	2,385	5	14	83	5	107	2,758	24,006	1·53	0·04	25·20	3·35	0·15	3·91	34·13	25·60	5
6	Poona	753,245	2,494	73	17,907	1,811	17	22	221	52	312	2,439	25,041	3·31	0·10	23·77	2·41	0·41	3·24	33·24	21·54	6
7	Sholápur	489,561	1,810	80	12,204	1,293	7	12	75	11	105	1,764	17,146	3·69	0·16	24·93	2·65	0·21	3·58	35·22	19·37	7
8	Sátára	1,010,868	2,924	40	24,295	3,125	16	25	177	55	267	4,688	35,340	2·89	0·04	24·03	3·09	0·27	4·64	34·96	22·84	8
9	Ratnágiri	975,527	123	161	8,106	1,267	9	9	181	115	314	4,253	14,224	0·13	0·16	8·31	1·30	0·32	4·36	14·58	15·59	9
	Southern Registration District.																					
10	Belgaum	869,824	3,331	143	11,744	5 003	14	34	143	43	234	5,621	26,276	4·36	0·18	14·50	6·18	0·29	6·94	32·45	26·83	10
11	Dhárwár	791,836	1,178	418	14,352	5,299	26	43	122	25	226	4,699	24,173	1·48	0·53	18·12	6·69	0·29	5·94	33·05	26·98	11
12	Bijápur	631,489	403	59	10,334	1,766	21	19	105	14	159	3,256	16,027	0·64	0·09	16·37	2·80	0·25	5·16	25·38	22·55	12
13	Kánara	397,450	336	257	7,138	790	15	12	181	22	230	3,682	12,433	0·84	0·65	17·96	1·99	0·58	9·26	31·28	28·68	13
	Eastern Gujarát Registration District.																					
14	Surat	401,125	332	..	11,592	1,800	7	12	150	44	213	570	14,516	0·68	..	23·60	3·60	0·43	1·18	29·55	28·51	14
15	Broach	278,170	188	1	9,462	360	2	8	71	21	102	491	10,604	0·68	..	34·02	1·29	0·37	1·76	38·12	30·85	15
16	Kaira	737,186	346	119	20,013	2,983	23	26	195	57	301	1,197	24,959	0·47	0·16	27·15	4·05	0·41	1·62	33·86	27·63	16
17	Panch Mahále	229,743	100	8	4,481	104	2	7	60	31	100	58	4,851	0·44	0·04	19·50	0·45	0·44	0·25	21·12	16·87	17
18	Ahmedabad	684,934	85	17	17,086	1,924	5	17	133	54	209	963	20,289	0·12	0·02	24·94	2·82	0·31	1·41	29·62	28·65	18
	Sind Registration District.																					
19	Karáchi	410,336	4,361	269	5,451	160	5	4	129	80	218	549	11,008	10·63	0·65	13·29	0·39	0·53	1·34	26·82	15·74	19
20	Hyderabad	709,429	2,849	116	9,911	94	9	9	182	171	371	392	13,733	4·02	0·16	13·97	0·13	0·52	0·55	19·35	12·88	20
21	Thar and Párkar	200,516	126	8	2,455	24	1	..	26	76	102	168	2,885	0·63	0·04	12·24	0·12	0·51	0·84	14·38	15·74	21
22	Shikárpur	769,913	3,141	79	9,441	160	3	8	175	93	282	139	13,233	4·08	0·09	12·26	0·22	0·36	0·17	17·19	14·46	22
23	Upper Sind Frontier ..	112,820	540	26	954	34	..	1	23	4	28	12	1,594	4·79	0·23	8·45	0·30	0·25	0·11	14·13	7·20	23
	Total of Districts ..	14,348,658	33,249	2,312	283,187	39,987	244	340	3,003	1,181	4,768	44,185	407,688	2·32	0·16	19·74	2·78	0·33	3·08	28·41	22·17	

ANNUAL FORM No. VI.—DEATHS *registered from* DIFFERENT CAUSES *in the* DISTRICTS *and* TOWNS *of the* BOMBAY PRESIDENCY *during the year 1885*—continued.

1	2	3	4	5	6	7	8					9	10	11								12
							Injuries.							Ratio of Deaths per 1,000 of Population.								
							Suicide.													From all Causes.		
No.	Districts and Towns.	Population according to Census of 1881.	Cholera.	Small-pox.	Fevers	Bowel-complaints.	Male.	Female.	Wounding or Accident.	Snake-bite or killed by wild beasts.	Total.	All other Causes.	Total Deaths from all Causes.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other Causes.	For the year.	Mean of preceding five years.	No.
	B.—TOWNS.																					
	Khándesh District.																					
1	Dhulia	18,449	50	..	269	56	..	..	..	..	..	61	436	2·71	..	14·58	3·03	..	3·31	23·63	15·61	1
2	Nandurbár	6,541	33	..	180	59	2	..	3	..	5	1	278	4·82	..	26·31	8·62	0·73	0·15	40·63	21·93	2
3	Chopda	13,932	66	..	260	2	..	..	1	..	1	..	329	4·74	..	18·66	0·14	0·07	..	23·61	18·44	3
4	Nasirabad	10,243	1	..	145	..	..	..	..	..	..	..	146	0·10	..	14·15	..	..	..	14·25	30·55	4
	Násik District.																					
5	Násik	24,101	395	1	481	77	1	..	9	..	10	256	1,220	16·39	0·04	19·96	3·19	0·41	10·62	50·62	42·86	5
6	Yeola	17,685	..	..	409	60	1	..	10	1	12	261	742	..	..	23·13	3·39	0·68	14·76	41·96	29·61	6
7	Devlali Cantonment ..	1,085	..	..	27	3	..	..	1	..	1	21	52	..	..	24·86	2·76	0·92	19·34	47·88	8·40	7
8	Málegaon do. ..	3,780	20	..	116	26	..	..	2	..	2	34	198	5·29	..	30·69	6·88	0·53	8·99	52·38	36·24	8
	Thána District.																					
9	Thána	14,456	132	..	246	30	2	..	6	2	10	46	464	9·13	..	17·02	2·08	0·69	3·18	32·10	19·16	9
10	Kalyán	12,910	156	..	162	1	1	1	4	..	6	76	401	12·08	..	12·55	0·08	0·47	5·88	31·06	17·43	10
11	City of Bombay	773,196	581	61	6,479	1,520	37	30	236	2	305	12,615	21,561	0·75	0·08	8·38	1·97	0·39	16·32	27·89	29·06	11
	Kolába District.																					
12	Panvel	10,351	45	..	38	8	..	..	3	..	3	25	119	4·35	..	3·67	0·77	0·29	2·41	11·49	20·29	12
13	Alibág	6,876	..	..	75	..	..	..	..	..	..	78	153	..	..	11·76	.	..	12·23	23·99	23·21	13
14	Mahád	6,804	..	1	76	9	..	..	3	..	3	37	126	..	0·15	11·17	1·32	0·44	5·44	18·52	23·31	14
	Ahmednagar District.																					
15	Ahmednagar	32,903	17	2	334	77	..	3	4	..	7	594	1,031	0·52	0·06	10·15	2·34	0·21	18·05	31·33	37·39	15
16	Sangamner	8,796	32	4	193	23	..	2	3	..	5	158	414	3·52	0·45	21·94	2·62	0·57	17·96	47·06	28·31	16
17	Ahmednagar Cantonment	4,589	5	..	17	4	..	..	..	..	..	66	92	1·00	..	3·70	0·87	..	14·38	20·05	28·31	17
	Poona District.																					
18	Poona City	99,622	144	183	1,243	272	5	8	45	..	58	1,690	3,690	1·45	1·84	13·48	2·73	0·58	16·96	37·04	28·57	18
19	Junnar	10,373	..	..	144	25	..	..	2	..	2	222	393	..	..	13·88	2·41	0·19	21·40	37·88	20·44	19
20	Poona Cantonment ..	25,042	..	1	446	40	1	3	7	1	12	317	816	..	0·04	17·81	1·59	0·48	12·66	32·58	16·56	20
21	Kirkee do.	3,560	1	..	29	1	..	1	2	..	3	59	93	0·28	..	8·15	0·28	0·84	16·58	26·12		21
	Sholápur District.																					
22	Sholápur	59,890	29	..	1,475	149	1	1	10	..	12	361	2,028	0·48	..	24·63	2·49	0·20	6·06	33·86	31·98	22
23	Bársi	16,126	33	..	511	22	..	2	7	..	9	183	763	2·36	..	31·68	1·36	0·56	11·35	47·31	38·32	23
24	Pandharpur	16,910	480	..	486	235	2	1	4	..	7	124	1,332	28·39	..	28·74	13·90	0·41	7·33	78·77	48·73	24
	Sátára District.																					
25	Sátára	29,028	13	1	435	296	..	..	2	..	2	127	814	0·44	0·03	15·33	8·13	0·07	4·37	28·37	23·39	25
26	Karad	10,778	127	..	156	27	..	..	2	1	3	69	382	11·78	..	14·47	2·51	0·28	6·40	35·44	24·87	26
27	Wai	11,676	88	1	167	37	..	..	2	..	2	137	432	7·54	0·09	14·30	3·17	0·17	11·73	37·00	21·15	27
	Ratnágiri District.																					
28	Vengurla	8,947	..	..	41	2	..	..	2	..	2	156	201	..	..	4·60	0·22	0·22	17·44	22·47	25·93	28
29	Ratnágiri	12,616	..	1	104	6	..	..	..	1	1	116	228	..	0·08	8·24	0·48	0·08	9·19	18·07	18·62	29
	Belgaum District.																					
30	Belgaum	23,115	72	..	217	30	4	1	6	1	12	183	514	3·11	..	9·39	1·30	0·52	7·92	22·24	23·45	30
31	Gokák	10,507	135	..	64	33	1	1	4	..	6	116	354	13·10	..	6·21	3·20	0·58	11·26	34·35	29·78	31
32	Athni	11,186	..	1	76	154	..	..	3	..	3	77	311	..	0·09	6·79	13·77	0·27	6·88	27·80	27·17	32
33	Belgaum Cantonment ..	9,682	11	..	75	44	1	..	4	..	5	56	191	1·15	..	7·83	4·59	0·52	5·84	19·93	14·03	33
	Dhárwár District.																					
34	Dhárwár	27,191	122	3	377	38	1	2	16	..	19	477	1,036	4·49	0·12	13·87	1·39	0·69	17·54	38·10	25·26	34
35	Hubli	36,077	54	8	388	123	2	1	7	..	10	568	961	1·47	0·22	10·58	3·35	0·28	10·03	25·93	27·10	35
36	Gadag-Betgeri	17,001	..	..	128	165	1	3	3	..	7	192	492	..	..	7·53	9·71	0·41	5·89	23·64	23·35	36
37	Ránebennur	10,802	..	..	93	34	..	2	1	..	3	133	262	..	..	9·12	3·34	0·29	13·52	26·27	23·52	37
	Bijápur District.																					
38	Kaládgi	7,024	2	..	39	36	..	..	..	..	..	16	93	0·28	..	5·55	5·12	..	2·28	13·24	18·22	38
	Kánara District.																					
39	Kárwár	13,761	..	4	133	14	..	1	2	1	4	124	279	..	0·29	9·66	1·02	0·29	9·01	20·27	19·69	39
40	Kumta	10,629	..	2	105	36	1	1	3	1	6	153	302	..	0·19	9·88	3·39	0·57	14·38	28·41	25·86	40
	Surat District.																					
41	Surat	109,244	314	1	2,017	50	6	7	27	2	42	974	3,398	2·86	..	18·36	0·45	0·38	8·88	30·93	26·27	41
42	Bulsar	13,259	..	..	67	31	1	1	1	..	3	37	138	..	..	5·06	2·34	0·23	2·80	10·43	14·53	42
	Broach District.																					
43	Broach	37,281	22	..	885	4	1	..	22	1	24	286	1,221	0·59	..	23·74	0·11	0·64	7·67	32·75	23·24	43
44	Jambusar	11,479	..	..	229	332	..	..	1	3	4	2	567	..	..	19·95	28·92	0·35	0·17	49·39	35·27	44
	Kaira District.																					
45	Kaira	12,640	21	3	349	100	..	..	6	1	7	56	536	1·66	0·24	27·61	7·91	0·55	4·43	42·40	32·43	45
46	Nadiád	28,304	17	..	1,196	77	..	2	9	2	13	90	1,393	0·60	..	42·65	2·72	0·46	3·18	49·21	29·03	46
47	Borsad	12,228	9	8	254	1	1	3	4	1	9	..	281	0·74	0·65	20·77	0·08	0·74	..	22·98	20·46	47
48	Kapadvanj	14,442	..	..	445	44	..	..	9	1	10	61	560	..	..	30·81	3·05	0·69	4·22	38·77	29·41	48

Annual Form No. VI.—DEATHS *registered from* Different Causes *in the* Districts *and* Towns *of the* Bombay Presidency *during the year 1885*—continued.

1	2	3	4	5	6	7	8					9	10	11								12
							Injuries.							Ratio of Deaths per 1,000 of Population.								
							Suicide.		Wounding or Accident.	Snake-bite or killed by wild beasts.										From all Causes.		
No.	Districts and Towns.	Population according to Census of 1881.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Male.	Female.			Total.	All other causes.	Total deaths from all causes.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other causes.	For the year.	Mean of previous five years.	No.
	B.—TOWNS—*continued.*																					
	Panch Mahâls District.																					
49	Godhra	13,342	14	..	149	33	1	2	7	..	10	27	233	1·05	..	11·17	2·47	0·75	2·02	17·46	17·64	49
50	Dohad	12,394	..	7	353	7	..	..	5	..	5	21	393	..	0·56	28·48	0·56	0·40	1·69	31·70	20·92	50
	Ahmedabad District.																					
51	Ahmedabad	124,767	49	..	4,566	103	1	2	13	..	16	1,995	6,729	0·39	..	36·60	0·82	0·13	15·99	53·93	46·74	51
52	Gogha	7,063	..	..	101	75	..	..	5	1	6	2	184	..	..	14·30	10·62	0·85	0·28	26·05	25·23	52
53	Viramgâm	18,999	..	..	733	229	..	..	3	..	3	39	1,010	..	..	38·57	12·11	0·16	0·05	53·19	45·05	53
54	Dholka	17,716	41	..	185	72	..	..	3	1	4	132	434	2·31	..	10·44	4·06	0·23	7·45	24·49	23·12	54
55	Ahmedabad Cantonment..	1,949	1	..	51	..	..	..	..	..	..	..	52	0·51	..	26·29	..	..	..	26·69	21·26	55
	Karâchi District.																					
56	Karâchi	68,332	188	3	725	128	4	..	27	..	31	629	1,704	2·75	0·04	10·61	1·87	0·45	9·21	24·94	22·90	56
	Hyderabad District.																					
57	Hyderabad	45,195	171	9	672	3	1	1	22	5	29	358	1,242	3·78	0·20	14·87	0·07	0·64	7·92	27·48	23·57	57
	Thar and Párkar District.																					
58	Umarkot	2,828	2	..	53	..	1	..	1	..	2	11	68	0·71	..	18·74	..	0·71	3·89	24·05	38·47	58
	Shikárpur District.																					
59	Shikárpur	42,496	45	22	737	1	1	..	8	..	9	27	841	1·06	0·52	17·34	0·02	0·21	0·64	19·79	29·03	59
60	Sukkur	27,389	222	6	319	43	..	..	21	..	21	93	704	8·10	0·22	11·65	1·57	0·77	3·39	25·70	17·26	60
61	Lárkhána	13,188	2	..	248	3	..	..	3	..	3	19	275	0·15	..	18·80	0·23	0·23	1·44	20·85	27·10	61
	Upper Sind Frontier District.																					
62	Jacobabad	11,352	72	1	172	18	..	..	..	..	..	42	305	6·34	0·09	15·15	1·59	..	3·70	26·87	17·95	62
	Total of Towns ..	2,094,180	4,038	334	31,050	5,069	82	82	616	29	809	24,603	65,903	1·93	0·16	14·83	2·42	0·39	11·75	31·47	28·27	
	Total for the Presidency ..	16,454,414	37,287	2,646	314,237	45,056	326	422	3,619	1,210	5,577	68,788	473,591	2·27	0·16	19·10	2·73	0·34	4·18	28·78	22·03	

N. B.—Districts A in this statement do not include the population or deaths of Towns B. In all the other statements "Districts" include Towns.
Total population for the Presidency includes Europeans, Eurasians and Fighting-men numbering 11,576.

Annual Form No. VII.—Deaths *registered from* Cholera *in the Districts of the* Bombay Presidency *during each month of the year 1885.*

1	2	3		4		5												6			7			8	9
		Circles of Registration.		Villages.														Total.			Ratio of Deaths per 1,000 of Population.				
No.	Districts.	Number in each District.	Number from which deaths from Cholera were reported.	Number in each District.	Number from which deaths from Cholera were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Male.	Female.	Total.	Male.	Female.	Total.	Mean Ratio per 1,000 of Population of previous five years.	No.
	Western Registration District.																								
1	Khándesh	26	25	2,679	173	..	..	..	38	116	317	813	298	211	67	39	3	1,020	880	1,900	1·61	1·45	1·54	2·40	1
2	Násik	16	13	1,629	196	..	218	169	81	346	675	611	410	91	107	20	6	1,455	1,282	2,737	3·66	3·34	3·50	1·69	2
3	Thána	12	12	1,880	174	411	176	173	24	208	505	374	417	241	36	24	..	1,308	1,281	2,589	3·14	2·27	2·21	0·93	3
4	City of Bombay ..	1	1	..	..	49	80	149	109	62	22	45	33	19	11	1	2	360	221	581	0·77	0·72	0·75	0·60	4
5	Kolába	10	7	1,191	36	92	95	147	33	103	391	96	8	..	..	..	5	510	465	975	2·09	1·95	2·19	0·99	5
	Central Registration District.																								
6	Ahmednagar	14	14	1,331	129	..	..	4	49	228	77	384	249	98	37	5	..	605	527	1,132	1·59	1·43	1·51	6·81	6
7	Poona	12	11	1,181	236	17	23	218	104	87	272	455	641	174	486	42	110	1,868	1,271	3,139	3·01	2·85	2·93	1·64	7
8	Sholápur	10	10	709	202	..	..	..	..	..	16	1,004	620	111	265	235	41	1,215	1,017	2,3[illegible]	4·56	3·52	4·04	1·55	8
9	Sátára	15	14	1,340	277	..	..	1	..	..	72	1,000	933	465	607	14[illegible]	30	1,643	1,509	3,152	3·09	2·34	2·97	0·97	9
10	Ratnágiri	10	5	1,225	16	8	11	16	16	..	6	34	21	5	..	6	..	55	68	123	0·12	0·16	0·12	0·16	10
	Southern Registration District.																								
11	Belgaum	11	10	1,073	228	156	32	5	50	1,323	1,842	450	217	60	13	1	..	1,979	1,770	3,749	4·55	4·12	4·34	1·99	11
12	Dhárwár	18	12	1,281	125	..	13	33	98	335	478	218	146	26	2	..	..	745	609	1,354	1·68	1·38	1·53	1·42	12
13	Bijápur	9	8	1,140	67	2	..	..	..	..	86	196	63	11	61	35	1	211	194	405	0·46	0·60	0·63	0·38	13
14	Kánara	13	5	1,107	33	4	..	3	7	176	114	31	..	..	..	..	1	183	153	336	0·82	0·76	0·80	0·21	14
	Eastern Gujarát Registration District.																								
15	Surat	10	8	780	69	..	3	63	177	165	181	14	15	7	10	11	..	318	328	646	1·04	1·06	1·05	1·17	15
16	Broach	8	7	403	38	..	..	2	2	5	69	54	52	8	18	..	..	114	96	210	0·48	0·61	0·64	0·49	16
17	Kaira	11	9	577	39	..	1	..	11	14	92	66	116	47	13	1	..	235	158	393	0·55	0·42	0·49	0·25	17
18	Panch Mahâls	7	4	673	20	..	..	..	4	32	26	31	16	4	..	..	..	65	49	114	0·49	0·39	0·45	0·23	18
19	Ahmedabad	12	6	857	15	..	..	..	8	..	1	12	50	33	36	36	..	99	77	176	0·23	0·18	0·21	0·26	19
	Sind Registration District.																								
20	Karáchi	14	14	3,753	760	60	91	297	264	283	1,837	1,591	63	63	..	..	..	2,866	1,883	4,649	1·02	8·85	9·50	0·22	20
21	Hyderabad	14	14	7,804	483	..	..	9	71	76	1,096	1,701	67	..	..	..	..	1,780	1,240	3,020	4·37	3·57	4·00	0·05	21
22	Thar and Párkar ..	8	3	1,690	28	..	..	..	..	..	17	59	22	..	..	..	..	73	55	128	0·45	0·60	0·63	0·00	22
23	Shikárpur	18	18	5,667	312	..	..	..	..	2	1,303	1,910	168	13	10	4	..	2,028	1,382	3,410	4·40	3·52	4·00	0·16	23
24	Upper Sind Frontier ..	4	4	854	67	..	..	..	..	7	165	240	200	..	..	..	..	362	250	612	5·16	4·63	4·93	0·15	24
	Total for the Presidency ..	283	234	40,894	3,733	799	743	1294	1144	3,481	9,310	11,450	4,834	1,690	1,689	634	199	20,527	16,760	37,287	2·42	2·16	2·27	0·94	

N. B.—The number of villages in Sind has been taken from the Annual Report of the Deputy Sanitary Commissioner, Sind Registration District.

ANNUAL FORM No. VIII.—DEATHS *registered from* SMALL-POX *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during each month of the year 1885.*

1	2	3		4		5												6			7		8			9	10
No.	DISTRICTS.	CIRCLES OF REGISTRATION.		VILLAGES.														TOTAL.			No. OF THESE DEATHS AMONG CHILDREN.		TOTAL RATIO OF DEATHS PER 1,000 OF POPULATION.			Mean Ratio per 1,000 of Population of previous five years.	No.
		No. in each District.	No. from which deaths from Small-pox were reported.	No. in each District.	No. from which deaths from Small-pox were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Male.	Female.	Total.	Under 1 year.	Under 12 years.	Male.	Female.	Total.		
	Western Registration District.																										
1	Khándesh	26	8	2,679	14	10	4	5	6	4	8	2	3	1	..	..	5	29	19	48	19	24	0·05	0·03	0·04	0·44	1
2	Násik	16	7	1,629	25	2	18	16	16	10	16	1	1	..	1	..	...	47	34	81	23	40	0·12	0·09	0·10	0·32	2
3	Thána	12	8	1,860	38	22	10	19	12	14	6	8	5	1	3	..	1	37	64	101	24	48	0·09	0·16	0·13	0·55	3
4	City of Bombay	1	1	..	1	6	4	13	14	13	9	..	1	..	..	..	1	27	34	61	27	19	0·05	0·11	0·08	0·50	4
5	Kolába	10	7	1,191	55	11	18	30	26	36	34	9	13	2	1	1	7	102	86	188	72	97	0·42	0·36	0·39	0·46	5
	Central Registration District.																										
6	Ahmednagar	14	8	1,331	9	..	..	14	2	4	4	1	6	..	..	2	..	19	14	33	13	5	0·05	0·04	0·05	0·11	6
7	Poona	12	9	1,181	31	14	32	61	75	41	21	10	6	..	..	1	1	127	135	262	88	142	0·28	0·30	0·29	0·45	7
8	Sholápur	10	7	709	31	20	33	8	6	1	5	3	2	..	..	2	...	37	43	80	43	33	0·13	0·15	0·14	0·15	8
9	Sátára	15	14	1,340	25	11	10	13	2	1	1	1	3	..	..	..	..	18	24	42	10	12	0·03	0·05	0·04	0·30	9
10	Ratnágiri	10	9	1,295	67	22	19	19	34	18	12	17	6	2	5	4	4	74	88	162	36	65	0·10	0·17	0·16	0·45	10
	Southern Registration District.																										
11	Belgaum	11	7	1,073	42	28	26	30	24	15	6	1	1	2	1	2	8	64	80	144	16	49	0·15	0·19	0·17	0·72	11
12	Dhárwár	8	14	1,281	145	62	59	85	63	38	43	27	25	9	5	4	9	232	197	429	1	8	0·54	0·45	0·49	0·78	12
13	Bijápur	9	6	1,140	26	9	9	9	10	5	7	6	1	3	..	..	..	35	24	59	22	23	0·11	0·07	0·09	0·78	13
14	Kánara	13	12	1,107	91	56	27	43	22	23	15	4	5	11	12	19	21	149	114	263	30	46	0·66	0·57	0·62	0·26	14
	Eastern Gujarát Registration District.																										
15	Surat	10	1	780	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1	1	..	..	..	..	0·48	15
16	Broach	8	1	403	1	..	..	..	..	..	1	..	..	..	..	..	..	1	..	1	1	..	0·01	..	0·01	0·09	16
17	Kaira	11	8	577	24	9	22	14	22	27	28	5	2	..	..	..	..	68	61	129	47	81	0·16	0·16	0·16	0·04	17
18	Panch Mahála	7	4	673	5	..	..	2	5	5	3	..	..	..	..	..	..	11	4	15	2	10	0·08	0·03	0·06	0·08	18
19	Ahmedabad	12	4	857	8	3	..	..	1	12	1	..	..	..	..	..	..	7	10	17	6	10	0·02	0·02	0·02	0·08	19
	Sind Registration District.																										
20	Karáchi	14	11	3,753	133	24	68	71	49	38	17	3	..	..	2	..	..	160	112	272	31	59	0·60	0·53	0·57	0·30	20
21	Hyderabad	14	11	7,804	60	31	15	32	17	11	9	2	4	..	..	4	..	56	69	125	32	55	0·14	0·20	0·17	0·39	21
22	Thar and Párkar ..	8	4	1,600	8	..	..	..	1	1	3	2	..	1	..	..	..	6	2	8	1	2	0·03	0·02	0·04	0·09	22
23	Shikárpur	18	13	5,667	41	12	9	3	13	10	24	9	2	4	3	3	6	45	53	98	33	38	0·10	0·14	0·11	0·16	23
24	Upper Sind Frontier ..	4	2	854	10	1	..	7	1	14	2	..	..	..	..	2	..	12	15	27	4	7	0·17	0·28	0·22	0·13	24
	Total for the Presidency.	283	176	40,897	887	353	383	500	421	341	274	112	86	36	33	44	63	1,364	1,282	2,646	582	863	0·16	0·16	0·16	0·38	

The number of villages in Sind has been taken from the Annual Report of the Deputy Sanitary Commissioner Sind Registration District.

ANNUAL FORM No. IX.—DEATHS *registered from Fevers in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during each month of the year 1885.*

1	2	3		4		5												6			7			8	9
No.	DISTRICTS.	CIRCLES OF REGISTRATION.		VILLAGES.														TOTAL.			RATIO OF DEATHS PER 1,000 OF POPULATION.			Mean Ratio per 1,000 of Population of previous five years.	No.
		No. in each District.	No. from which deaths from Fevers were reported.	No. in each District.	No. from which deaths from Fevers were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Male.	Female.	Total.	Male.	Female.	Total.		
	Western Registration District.																								
1	Khándesh	26	26	2,679	2,308	1,647	1,740	1,989	1,874	1,883	1,744	2,113	2,637	3,303	3,320	2,563	2,478	14,348	12,967	27,315	22·69	22·08	22·08	20·33	1
2	Násik	16	16	1,629	1,332	1,134	1,083	1,138	1,103	1,339	1,556	2,012	2,562	2,246	2,482	1,920	1,595	10,480	9,698	20,178	26·37	25·27	25·83	19·34	2
3	Thána	12	12	1,860	1,815	1,394	1,622	1,469	1,110	897	1,083	907	1,138	1,406	1,268	1,424	1,776	8,535	7,715	16,150	20·27	19·72	20·00	17·29	3
4	City of Bombay	1	1	..	1	518	508	578	656	643	543	292	530	514	472	484	639	3,445	3,024	6,479	7·41	9·1	8·26	8·61	4
5	Kolába	10	10	1,191	1,087	711	760	668	505	523	526	527	585	535	541	620	785	3,730	3,562	7,292	15·28	14·92	15·10	15·35	5
	Central Registration District.																								
6	Ahmednagar	14	14	1,331	1,283	946	942	975	1,136	1,211	1,331	1,929	2,404	2,979	2,203	1,767	1,380	9,485	8,818	18,204	24·86	23·86	24·36	19·27	6
7	Poona	12	12	1,181	1,155	1,201	1,221	1,159	1,110	1,189	1,407	2,119	2,522	2,08[illegible]	2,464	1,877	1,512	10,234	9,635	19,869	22·49	21·42	22·06	15·84	7
8	Sholápur	10	10	709	696	762	706	798	710	855	886	1,379	1,623	1,86[illegible]	2,065	1,863	1,459	7,448	7,228	14,676	25·26	25·13	24·20	18·25	8
9	Sátára	15	15	1,340	1,254	1,653	1,445	1,520	1,427	1,746	1,731	2,485	3,052	2,602	2,952	2,376	2,064	12,587	12,466	25,053	23·64	23·48	23·56	18·68	9
10	Ratnágiri	10	10	1,295	1,174	731	756	712	653	619	533	631	707	673	644	714	875	4,210	4,041	8,251	8·90	7·71	8·28	11·03	10
	Southern Registration District.																								
11	Belgaum	11	11	1,073	1,008	776	787	953	1,047	1,250	1,391	1,231	1,112	893	897	930	879	6,154	6,022	12,176	14·16	14·01	14·09	12·77	11
12	Dhárwár	18	18	1,281	1,244	1,157	1,066	1,232	1,301	1,435	1,350	1,406	1,316	1,012	1,140	1,259	1,484	7,538	7,596	15,338	17·05	17·69	17·37	14·21	12
13	Bijápur	9	9	1,140	1,019	557	533	589	648	774	850	1,059	1,162	1,041	1,193	1,159	867	5,139	5,284	10,423	16·18	16·46	16·32	11·36	13
14	Kánara	13	13	1,107	1,012	669	679	705	612	548	503	619	389	526	577	626	726	3,725	3,651	7,376	16·70	18·36	17·49	16·14	14
	Eastern Gujarát Registration District.																								
15	Surat	10	10	780	734	1,204	1,154	1,163	963	1,019	990	968	1,170	1,191	1,257	1,334	1,268	6,917	6,749	13,676	22·60	21·03	22·27	21·11	15
16	Broach	8	8	403	397	828	782	815	739	762	727	748	977	1,085	1,077	1,011	975	5,518	5,058	10,576	42·75	34·42	39·33	26·32	16
17	Kaira	11	11	577	576	1,352	1,291	1,593	1,613	1,789	2,070	2,114	2,354	2,506	2,275	1,898	1,567	11,942	10,315	22,257	37·98	27·29	27·63	22·96	17
18	Panch Mahála	7	7	673	550	389	367	363	383	370	440	393	408	466	536	508	456	2,968	2,315	4,983	20·34	18·62	19·50	15·62	18
19	Ahmedabad	12	12	857	823	1,738	1,865	2,112	2,025	1,929	1,711	1,518	1,881	2,061	2,110	2,018	1,961	12,080	10,647	22,727	27·49	25·53	26·54	21·99	19
	Sind Registration District.																								
20	Karáchi	14	14	3,753	1,644	656	520	522	555	514	477	483	273	338	476	631	726	3,400	2,770	6,176	12·81	13·02	12·91	12·46	20
21	Hyderabad	14	14	7,804	2,947	1,344	913	1,124	787	773	658	653	471	531	817	1,231	1,401	5,938	4,645	10,583	14·58	13·37	14·03	11·71	21
22	Thar and Párkar ..	8	8	1,600	956	350	269	214	207	230	199	145	104	170	148	229	222	1,434	1,274	2,708	12·76	11·81	12·33	14·65	22
23	Shikárpur	18	18	5,667	2,614	1,254	842	922	788	773	929	918	481	611	1,055	1,142	1,080	6,041	4,704	10,745	13·10	12·00	12·61	13·65	23
24	Upper Sind Frontier ..	4	4	854	396	140	65	92	80	71	111	118	61	67	86	120	115	658	468	1,126	9·33	8·66	9·07	6·95	24
	Total for the Presidency.	283	283	40,894	28,216	23,497	21,607	23,550	22,062	23,229	22,751	26,767	30,171	29,348	32,027	29,904	28,236	163,561	150,676	314,237	19·25	18·94	19·10	15·92	

The number of villages in Sind has been taken from the Annual Report of the Deputy Sanitary Commissioner Sind Registration District.

ANNUAL FORM No. X.—DEATHS *registered from* BOWEL-COMPLAINTS *in the* DISTRICT *of the* BOMBAY PRESIDENCY *during each month of the year 1885.*

1	2	3		4		5												6			7			8	9
No.	Districts.	CIRCLES OF REGISTRATION.		VILLAGES.														TOTAL.			RATIO OF DEATHS PER 1,000 OF POPULATION.			Mean Ratio per 1,000 of Population of previous five years.	No.
		Number in each District.	Number from which deaths from Bowel-complaints were reported.	Number in each District.	Number from which deaths from bowel-complaints were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Male.	Female.	Total.	Male.	Female.	Total.		
	Western Registration District.																								
1	Khándesh	26	25	2,679	1,132	309	400	399	374	481	419	496	641	709	627	437	418	3,216	2,494	5,710	5·08	4·12	4·61	3·64	1
2	Násik	16	16	1,629	620	171	161	185	176	202	277	324	408	465	338	290	228	1,825	1,539	3,364	4·59	3·01	4·31	2·54	2
3	Thána	12	12	1,889	206	77	45	30	19	21	36	33	95	85	45	34	28	296	252	548	0·71	0·34	0·53	0·32	3
4	City of Bombay ..	1	1	..	1	167	154	104	111	80	114	146	168	156	130	99	82	850	670	1,520	1·83	2·17	1·97	2·34	4
5	Kolába	10	9	1,191	184	14	30	17	23	32	29	35	31	26	38	18	40	195	138	333	0·79	0·58	0·68	0·41	5
	Central Registration District.																								
6	Ahmednagar	14	14	1,331	546	165	152	108	117	140	233	251	297	284	296	237	200	1,371	1,098	2,469	3·59	2·97	3·28	2·31	6
7	Poona	12	12	1,181	410	139	128	137	123	110	152	209	272	248	287	192	132	1,184	965	2,149	2·60	2·17	2·39	1·59	7
8	Sholápur	10	10	709	264	68	70	78	67	91	94	161	208	220	265	229	148	901	708	1,609	3·06	2·77	2·92	1·78	8
9	Sátára	15	15	1,340	418	169	120	127	120	122	173	236	339	458	440	304	208	1,780	1,640	3,420	3·36	3·19	3·22	1·62	9
10	Ratnágiri	10	10	1,298	502	118	142	124	115	99	75	93	125	109	91	98	90	730	545	1,275	1·54	1·04	1·28	1·06	10
	Southern Registration District.																								
11	Belgaum	11	11	1,073	688	378	297	340	327	515	562	564	545	407	428	489	412	2,759	2,505	5,264	6·33	5·83	6·09	4·67	11
12	Dhárwár	18	18	1,281	955	415	387	370	410	437	508	608	630	467	471	491	465	3,014	2,645	5,659	6·84	5·98	6·41	4·71	12
13	Bijápur	9	9	1,140	410	109	79	86	91	116	149	175	221	188	261	199	130	986	816	1,802	3·10	2·54	2·82	2·18	13
14	Kánara	13	13	1,107	322	75	55	66	58	69	67	65	96	87	82	60	69	477	363	840	2·18	1·83	1·99	1·87	14
	Eastern Gujarát Registration District.																								
15	Surat	10	10	780	340	164	169	155	138	120	142	127	171	152	168	196	179	1,022	859	1,881	3·34	2·79	3·06	2·62	15
16	Broach	8	8	403	166	65	42	50	48	53	50	39	74	82	78	58	64	376	326	698	2·12	2·06	2·10	1·68	16
17	Kaira	11	11	577	317	189	184	203	217	234	326	371	355	337	313	255	286	1,731	1,474	3,205	4·06	3·29	3·68	2·60	17
18	Panch Mahals	7	7	673	66	8	13	13	7	1	17	14	17	11	9	16	18	68	76	144	0·52	0·61	0·56	0·42	18
19	Ahmedabad	12	12	857	314	186	146	193	178	145	187	207	250	296	262	194	160	1,339	1,065	2,404	3·05	2·55	2·81	1·53	19
	Sind Registration District.																								
20	Karáchi	14	13	3,753	103	21	17	20	28	19	29	42	21	26	27	20	18	167	121	288	0·63	0·57	0·60	0·41	20
21	Hyderabad	14	14	7,804	73	15	5	15	2	19	13	10	5	2	..	4	3	63	34	97	0·18	0·10	0·13	0·11	21
22	Thar and Párkar ..	8	6	1,690	18	4	1	5	7	..	3	..	2	..	1	..	1	13	11	24	0·12	0·12	0·12	0·07	22
23	Shikárpur	18	17	5,667	75	13	10	6	3	6	44	54	12	..	6	25	16	132	75	207	0·23	0·19	0·21	0·25	23
24	Upper Sind Frontier ..	4	4	854	25	5	1	2	1	1	3	14	4	5	4	8	4	27	25	52	0·38	0·46	0·42	0·27	24
	Total for the Presidency.	233	277	40,894	8,094	3,035	2,788	2,831	2,767	3,132	3,695	4,580	5,377	4,840	4,724	3,945	3,332	24,522	20,534	45,056	2·89	2·53	2·73	1·83	

The number of villages in Sind has been taken from the annual report of the Deputy Sanitary Commissioner, Sind Registration District.

A.—VACCINE DEPARTMENT.

Statement No. I, showing Particulars of Vaccination in the Bombay Presidency during the year 1885-86.

Number.	Circles and Districts.	Population of District according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinations.				Re-vaccinations.		Percentage of Successful Cases		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE WESTERN REGISTRATION DISTRICT.				Males.	Females.	Total.														
	KHÁNDESH COLLECTORATE—																				
1	Nandurbár Town	6,841	14,993·97	...	.....	...	...	*Vide*	Statement	No.	III.	...	...	...	...	...	...	...	...	10	1·46
2	Dhulia Town	18,449	10,023·23	1	P. 432 R. 9	400 3	832 12	844	832	595	121	734	12	9	88·22	75·00	40·27	780	42·28	1	0·05
3	Chopda Town, Local Fund ...	13,932	29,234·36	1	P. 281 R. 3	264 ...	545 3	548	545	397	148	545	3	3	100·	100·	39·33	452	32·44	1	0·07
4	Nasirabad Town do. ...	10,243	61,266·54	1	P. 294 R. 1	315 ...	609 1	610	609	473	117	590	1	1	96·88	100·	57·70	334	32·61	19	1·85
5	In the 22 Rural Circles, Local Fund	1,187,766	119·49	23	P. 17,819 R. 265	17,301 264	35,120 469	1,547	35,174	23,483	10,855	34,543	469	379	98·36	80·81	29·40	35,049	29·51	488	0·41
	Total ...	1,237,231	124·43	26	P. 18,826 R. 278	18,280 207	37,106 485	1,446	37,160	24,948	11,241	36,412	485	392	98·13	80·82	29·75	36,615	29·59	519	0·42
	NÁSIK COLLECTORATE—																				
6	Yeola Town	17,685	80,845·71	...	.....	...	...	*Vide*	Statement	No.	III.	...	...	...	...	...	...	...	...	15	0·85
7	Násik do.	24,101	48,528·85	1	P. 345 R. 58	383 6	728 64	792	728	484	236	722	64	53	99·18	82·81	32·16	837	34·73	10	0·41
8	Devláli Cantonment	2,969		...	43	44	87	87	97	56	11	67	...	...	77·01	...	22·57	124	41·76	...	...
9	Málegaon Cantonment, Local Fund	3,780	...	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	107	28·31	...	...
10	In the 12 Rural Circles, Local Fund	732,671	123·36	12	P. 9,272 R. 35	9,099 7	18,371 42	1,534	18,427	12,984	4,845	17,966	42	38	97·80	90·48	24·57	18,652	25·46	215	0·29
	Total ..	781,206	131·52	13	P. 9,660 R. 93	9,526 13	19,186 106	1,484	19,252	13,524	5,092	18,755	106	91	97·75	85·85	24·12	19,720	25·24	240	0·31
	THÁNA COLLECTORATE—																				
11	Kalyán Town	12,910	5,164·	1	P. 193 R. 8	241 9	434 17	451	434	228	188	419	17	14	96·54	82·35	33·54	421	32·61	4	0·31
12	Thána do.	14,456	2,069·76	1	P. 363 R. 254	242 2	605 256	861	605	446	31	605	256	5	100·	1·95	42·20	872	60·32	6	0·42
13	In the 10 Rural Circles ... Local Fund	780,001	198·65	12	P. 8,492 R. 68	8,505 64	16,997 132	1,427	17,021	8,239	8,136	16,687	132	88	98·18	66·67	21·51	17,382	22·28	472	0·61
	Municipal ...			...	P. 104 R. 3	114 1	218 4	222	218	145	45	190	4	4	87·16	100·	0·02				
	Total ...	807,367	205·12	14	P. 9,152 R. 333	9,102 76	18,254 409	1,333	18,278	9,058	8,400	17,901	409	111	98·07	27·14	22·31	18,675	23.13	482	0·60

Statement No. I, showing Particulars of Vaccination, &c.,—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator	Primary Vaccinations.				Re-Vaccinations.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE WESTERN REGISTRATION DISTRICT—*continued.*				Males.	Females.	Total.														
	KOLÁBA COLLECTORATE—																				
14	Panvel Town	10,351	3,450·33	1	P. 87 R. 2	72 1	159 3	162	159	107	41	148	3	1	93·08	33·33	14·39	592	57·19	9	0·87
15	Alibág do.	6,376	10,544·29	1	13	9	22	22	22	9	3	14	...	...	63·64	...	2·20	33	5·18	8	1·25
16	Mahád do. Local Fund ...	6,804	15,892·55	...	.....	...	...	*Vide*	Stateme	nt No.	III.	...	...	...	...	...	...	...	...	5	0·73
17	In the 7 Rural Circles ... Local Fund	459,299	255·29	9	P. 6,659 R. 233	6,378 191	13,037 424	1,496	13,062	9,001	3,736	12,851	424	308	98·57	72·64	28·65	11,481	25·00	186	0·40
	In the 7 Rural Circles ... Municipal ...			...	P. 178 R. 4	177 8	355 12	367	357	324	25	350	12	7	98·59	58·33	0·78				
	Total ...	482,830	267·76	11	P. 6,937 R. 239	6,636 200	13,573 439	1,274	13,600	9,441	3,805	13,363	439	316	98·45	71·98	28·33	12,106	25·07	208	0·43
	NATIVE STATES—																				
18	Dang Territory, Local Fund ...	60,270	15·70	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	264	4·28	...	...
19	Jawhár	48,556	90·93	1	742	716	1,458	1,458	1,458	986	468	1,458	...	...	100·	...	30·03	1,855	38·20	...	...
20	Janjira	76,361	234·96	2	P. 1,269 R. 1	1,257 ...	2,526 1	1,263	2,538	1,411	1,088	2,523	1	1	99·88	100·	33·05	2,196	28·76	...	...
	TOTALS BY ESTABLISHMENTS IN WESTERN REGISTRATION DISTRICT.																				
	Cantonment	2,969	...	...	43	44	87	87	97	56	11	67	...	...	77·01	...	22·57	10	3·37	...	...
	Municipal	86,643	5,594·38	6	P. 1,715 R. 338	1,638 30	3,353 368	620	3,355	2,338	690	3,182	368	93	94·90	25·27	37·80	4,111	51·22	30	0·36
	Local Fund	3,219,022	148·98	58	P. 42,817 R. 605	41,862 466	84,679 1,071	1,478	84,838	54,577	27,837	83,182	1,071	817	98·23	76·28	26·39	83,260	25·34	1,419	0·43
	Native States	185,187	39·41	3	P. 2,011 R. 1	1,973 ...	3,984 1	1,328	3,996	2,397	1,556	3,981	1	1	99·92	100·	21·50	4,051	32·43	..	...
	Grand Total ...	3,493,821	132·74	67	P. 46,586 R. 944	45,517 496	92,103 1,440	1,396	92,286	59,368	30,094	90,412	1,440	911	98·16	63·26	26·14	91,432	26·17	1,449	0·41
	THE PRESIDENCY CIRCLE.																				
21	Bombay City (Municipal) ...	773,196	35,145·27	8	P. 8,101 R. 596	8,420 76	16,521 672	2,149	16,806	13,547	2,246	15,931	672	503	96·43	74·85	21·25	19,853	25·68	101	0·13

	THE CENTRAL REGISTRATION DISTRICT.																					
	AHMEDNAGAR COLLECTORATE—																					
22	Ahmednagar Town	32,903	75,693·63	1	P. 642	609	1,251	1,266	1,251	650	478	1,136	15	8	90·81	53·33	34·77	1,111	33·77	26	0·79
					R. 15	...	15														
23	Do. Cantonment ...	4,589			P. 68	53	121	145	121	79	39	120	24	24	99·17	100·	31·38	101	22·01	...	...
					R. 24	...	24														
24	Sangamner Town, Local Fund.	8,796	14,814·32	...	P. 214	232	446	447	446	324	85	411	1	1	92·15	100·	46·84	405	46·04	1	0·11
					R. 1	...	1														
25	In the 11 Rural Circles. Local Fund	704,940	105·76	12	P. 14,555	13,865	27,920	2,354	27,932	20,027	5,952	27,005	326	236	96·72	72·39	38·64	23,488	33·32	57	0·08
					R. 244	82	326														
	Municipal ..	...	...	...	P. 221	213	434	447	434	225	138	365	13	7	84·10	53·85	0·53	...	...	...	...
					R. 12	1	13														
	Total ...	751,228	112·69	13	P. 15,200	14,972	30,172	2,350	30,184	22,205	6,692	29,037	379	276	96·24	72·82	39·02	25,105	33·42	84	0·11
					R. 296	83	379														
	POONA COLLECTORATE—																					
26	Poona City	99,622	19,924·40	2	P. 1,539	1,481	3,020	1,567	3,020	1,675	1,133	2,828	114	51	93·65	44·74	28·90	2,705	27·15	88	0·88
					R. 98	16	114														
27	Poona and Kirkee Cantonments	37,381	4,255·40	1	P. 845	586	1,431	1,738	1,431	1,053	317	1,375	307	156	96·09	50·81	40·96	1,459	39·03	13	0·35
					R. 247	60	307														
28	Junnar Town	10,373	28,492·36	...	P. 203	199	402	403	402	233	152	391	1	1	97·26	100·	37·79	...	...	...	...
					R.	1	1														
29	In the 8 Rural Circles, Local Fund	753,245	141·23	14	P. 12,332	12,038	24,370	1,761	24,394	12,913	9,491	22,545	280	239	92·51	85·36	30·25	17,059	22·65	328	0·44
					R. 243	37	280														
	Total ...	900,621	168·41	17	P. 14,919	14,304	29,223	1,760	29,247	15,874	11,093	27,139	702	447	92·87	63·68	30·63	21,223	23·56	429	0·48
					R. 588	114	702														
	SHOLÁPUR COLLECTORATE—																					
30	Sholápur Town...	59,890	44,987·79	1	P. 990	973	1,963	2,236	1,963	1,316	497	1,839	273	216	93·68	79·12	34·31	1,950	32·56	30	0·50
					R. 230	43	273														
31	Bársi do.	16,126	43,002·6	1	P. 353	327	680	682	680	413	241	654	2	2	96·18	100·	40·68	814	50·48	7	0·43
					R. 2	...	2														
32	Pandharpur Town	16,910	33,299·69	1	P. 435	418	853	881	853	749	72	826	28	6	96·83	21·43	49·20	1,267	74·93	...	...
					R. 27	1	28														
33	In the 7 Rural Circles. Local Fund ..	489,561	108·33	9	P. 10,089	10,125	20,214	2,250	20,218	14,919	4,195	19,197	39	29	94·97	74·36	39·27	16,340	33·38	60	0·12
					R. 38	1	39														
	Municipal ...	...	...	...	P. 794	778	1,572	1,656	1,572	1,350	157	1,511	84	38	96·12	45·24	3·16				
					R. 79	5	84														
	Total ..	582,487	128·83	12	P. 12,661	12,621	25,282	2,142	25,286	18,747	5,162	24,027	426	291	95·04	68·31	41·75	20,371	34·97	97	0·17
					R. 376	50	426														
	SÁTÁRA COLLECTORATE—																					
34	Karád Town	10,778	29,352·85	...	.....	...	...	...	*Vide* Statement	No. III.	...	...	...	...	...	...	...	19	1·76	5	0·46
35	Wai do.	11,676	5,838·	...	.....	...	...	...	Do.	...	...	...	...	...	...	...	...	...	...	6	0·51
36	Sátára do.	29 028	35,319·24	1	P. 538	464	1,002	1,111	1,002	730	272	1,002	109	109	100·	100·	38·27	998	34·38	11	0·38
					R. 106	3	109														
37	In the 12 Rural Circles, Local Fund	1,010,868	202·80	18	P. 20,875	19,712	40,587	2,261	40,635	27,911	10,009	38,027	116	68	93·69	58·62	37·69	30,909	30·58	306	0·30
					R. 102	14	116														
	Total ...	1,062,350	212·98	19	P. 21,413	20,176	41,589	2,201	41,637	28,641	10,281	39,029	225	177	93·84	78·67	36·90	31,926	30·05	328	0·31
					R. 208	17	225														

Statement No. I, showing Particulars of Vaccination, &c.—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinations.				Re-vaccinations.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE CENTRAL REGISTRATION DISTRICT—*continued.*				Males.	Females.	Total.														
	RATNÁGIRI COLLECTORATE—																				
38	Vengurla Town...	8,947	336,828·24	1	P. 107 R. 1	118 ...	225 1	226	225	141	83	224	1	1	99·56	100·	25·15	52	5·81	28	3·13
39	Ratnágiri do. Local Fund...	12,616	322,969·60	...	P. 157 R. 2	151 2	308 4	312	311	196	90	289	4	1	93·83	25·00	22·99	268	21·24	17	1·35
40	In the 8 Rural Circles, Local Fund	975,527	248·73	13	P. 16,466 R. 322	15,855 161	32,321 483	2,523	32,379	17,297	13,800	31,694	483	407	98·06	84·26	32·91	23,713	24·31	408	0·42
	Total ...	997,090	254·22	14	P. 16,730 R. 325	16,124 163	32,854 488	2,382	32,915	17,634	13,973	32,207	488	409	98·03	83·81	32·71	24,033	24·10	453	0·45
	NATIVE STATES—																				
41	Akalkot	58,040	116·54	1	P. 971 R. 36	887 2	1,858 38	1,896	1,861	1,171	522	1,751	38	28	94·24	73·68	30·65	1,908	32·09	...	...
42	Modnimb	13,773	154·75	...	314	271	585	585	585	407	153	561	...	...	95·90	...	40·73	366	26·57	...	...
	SÁTÁRA JÁGHÍRS—																				
43	Pant Pratinidhi...	58,916	131·80	1	P. 667 R. 5	614 4	1,281 9	1,290	1,307	431	681	1,114	9	4	86·96	44·44	18·98	1,013	17·19	...	...
44	Pant Sachiv	145,876	97·84	3	P. 2,184 R. 18	2,107 15	4,291 33	1,441	4,291	1,789	2,382	4,287	33	33	99·91	100·	29·61	2,403	16·47	...	...
45	Phaltan	58,402	147·11	1	P. 1,021 R. 4	916 ...	1,937 4	1,941	1,937	1,098	715	1,818	4	3	93·86	75·00	31·18	1,330	22·77	...	...
46	Jath	55,493	56·68	1	1,121	1,057	2,178	2,178	2,179	1,097	779	1,881	...	...	86·36	...	33·90	1,415	25·50	...	...
	Total ...	318,687	96·16	6	P. 4,993 R. 27	4,694 19	9,687 46	1,622	9,714	4,415	4,557	9,100	46	40	93·94	86·96	28·68	6,161	19·33	...	...
47	Sávantvádi	174,433	193·81	3	P. 2,826 R. 509	2,879 374	5,705 883	2,196	5,779	4,519	901	5,453	883	426	95·58	48·24	33·70	5,386	30·88	...	...
	TOTALS BY ESTABLISHMENTS IN CENTRAL REGISTRATION DISTRICT.																				
	Cantonment	37,381	4,255·40	1	P. 845 R. 247	586 60	1,431 307	1,738	1,431	1,053	317	1,375	307	156	96·09	50·81	40·96	1,448	38·74	13	0·35
	Municipal	2,680,150	31,318·17	8	P. 5,687 R. 594	5,434 69	11,121 663	1,473	11,121	7,328	3,110	10,505	663	462	94·46	69·68	40·92	10,726	41·40	165	0·64
	Local Fund	3,988,380	156·85	66	P. 74,391 R. 952	72,177 298	146,568 1,250	2,240	1,46,717	94,720	43,774	139,559	1,250	982	95·22	78·56	35·24	110,484	27·64	1,213	0·30
	Native State	564,933	117·52	10	P. 9,104 R. 572	8,731 395	17,835 967	1,880	17,939	10,512	6,133	16,865	967	494	94·56	51·09	30·73	13,821	24·46	...	...
	Grand Total ..	4,858,709	160·61	85	P. 90,027 R. 2,365	86,928 822	176,955 3,187	2,119	1,77,208	113,613	53,334	168,304	3,187	2,094	95·11	65·70	35·07	136,479	28·05	1,391	0·29

	THE SOUTHERN REGISTRATION DISTRICT.																					
	BELGAUM COLLECTORATE—																					
48	Gokák Town	10,307	26385·92	...	.....	...		*Vide* Statement III.			...	...	...	...	...	...	...	...	...	4	0·39
49	Athni do.	11,186	12195·98	1	P. 231 R. 6	213 2	444 8	452	444	313	106	420	8	5	94·59	62·50	37·99	...	...	4	0·36
50	Nipáni do.	9,777	21651·49	1	75	51	126	126	126	85	30	115	...	...	91·27	...	11·76	71	7·26	...	...
51	Belgaum do.	23,115	51188·93	1	P. 403 R. 10	391 1	794 11	1,193	797	576	125	706	11	3	88·92	27·27	30·67	880	38·07	43	1·86
52	Do. Cantonment	9,582	...	...	P. 138 R. 111	130 2	268 120		269	213	36	251	120	89	93·66	74·17	35·48	204	21·29	3	0·31
53	In the 7 Rural Circles, Local Fund.	800,047	171·88	15	P. 14,499 R. 745	13,711 200	28,210 945	1,944	28,230	17,120	9,721	27,062	945	673	95·93	71·22	34·67	21,085	26·35	559	0·70
	Total ...	864,014	185·54	18	P. 15,346 R. 879	14,496 205	29,842 1,084	1,718	29,866	18,307	10,018	28,554	1,084	770	95·68	71·03	33·94	22,240	25·74	613	0·71
	DHÁRWÁR COLLECTORATE—																					
54	Dhárwár Town	27,191	23676·52	1	P. 716 R. 48	755 9	1,471 57	1,528	1,480	1,149	248	1,402	57	39	95·31	68·42	53·00	1,173	43·14	18	0·66
55	Hubli do.	36,677	31090·44	1	P. 736 R. 21	721 6	1,457 27	1,484	1,457	1,193	229	1,425	27	23	97·80	85·19	39·48	1,369	37·33	22	0·60
56	Gadag Bettigeri Town ...	17,001	61127·19	1	P. 798 R. 17	766 2	1,564 19	1,583	1,564	1,231	214	1,449	19	12	92·65	63·16	85·94	1,146	67·41	11	0·65
57	Ránebennur do. Local Fund.	10,202	27666·44	1	P. 722 R. 21	762 16	1,484 37	1,521	1,484	882	541	1,442	37	29	97·17	78·38	144·19	952	93·31	6	0·59
58	In the 14 Rural Circles, do. ...	791,836	174·73	16	P. 13,290 R. 707	12,870 200	26,160 907	1,692	26,195	15,695	8,982	25,107	908	566	95·97	62·40	32·42	18,901	23·87	594	0·75
	Total ...	882,907	194·70	20	P. 16,262 R. 814	15,874 233	32,136 1,047	1,659	32,180	20,150	10,214	30,825	1,048	669	95·92	63·90	35·67	23,541	26·66	651	0·74
	BIJÁPUR COLLECTORATE—																					
59	Bágalkot Town...	12,850	42174·36	1	P. 567 R. 14	537 1	1,104 15	1,119	1,104	819	187	1,010	15	6	91·49	40·00	79·07	911	70·89	...	...
60	Kaládgi do. Local Fund ...	7,024	59938·13	...	.....	...	...	...	...	...	...	...	...	...	..	...	...	154	21·92	7	1·00
61	Do. Cantonment, do. ...																					
62	In the 8 Rural Circles, do. ...	618,619	107·46	8	P. 9,963 R. 448	9,746 114	19,709 562	2,534	19,719	12,696	6,343	19,258	562	384	97·71	63·33	31·75	15,141	24·48	489	0·79
	Total ...	638,493	110·90	9	P. 10,530 R. 462	10,283 115	20,813 577	2,377	20,823	13,515	6,530	20,268	577	390	97·38	67·59	32·35	16,206	25·38	496	0·78
	KÁNARA COLLECTORATE—																					
63	Kárwár Town	13,761	1,169·44	1	P. 388 R. 117	309 26	697 143	840	698	179	233	584	143	109	83·79	76·22	50·36	333	24·20	3	0·22
64	Kumta do. Local Fund ...	10,629	1,445·82	...	P. 132 R. 1	120 ...	252 1	253	252	127	64	192	1	...	76·19	...	18·06	191	17·97	30	2·82
65	In the 11 Rural Circles, Local Fund.	397,450	102·13	13	P. 4,907 R. 340	4,701 167	9,608 507	778	9,644	2,400	5,197	8,706	508	354	90·61	69·32	22·30	9,812	24·69	295	0·74
	Total ...	421,840	107·87	14	P. 5,427 R. 458	5,130 193	10,557 651	801	10,594	2,706	5,494	9,482	652	463	89·92	71·12	23·58	10,336	24·50	328	0·78

Statement No. I, showing particulars of Vaccination, &c.—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated. Males.	Females.	Total.	Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinations. Total.	Successful. Under 1 year.	Over 1 and under 6 years.	Total of all Ages.	Re-vaccinations. Total.	Successful.	Percentage of Successful Cases. Primary.	Re-vaccination.	Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years. Number.	Ratio per 1,000.	Average Annual Number of Deaths from Small-pox during previous five years. Number.	Ratio per 1,000.
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE SOUTHERN REGISTRATION DISTRICT—*continued.*																				
	SOUTHERN MARÁTHA JÁGHI'RS—																				
66	Sángli	196,832	219·68	6	P. 2,632 R. 41	2,499 11	5,131 52	864	5,132	2,991	1,720	4,748	52	41	92·54	78·85	24·33	3,430	17·43	...	...
67	Jamkhandi	83,917	170·56	2	P. 1,729 R. 23	1,809 5	3,538 28	1,783	3,538	2,427	1,000	3,465	28	18	97·94	64·29	41·51	3,231	38·50	...	...
68	Miraj (Senior)	55,959	222·94	2	P. 1,168 R. 48	1,136 11	2,304 59	1,181	2,314	1,655	470	2,137	59	41	92·75	69·49	38·92	1,716	30·66	...	...
69	Do. (Junior)	30,541	146·83	2	P. 325 R. 5	304 6	629 11	320	629	394	169	566	11	10	89·98	90·91	18·86	572	18·73	...	...
70	Kurundvád (Elder)	35,187	193·33	1	P. 487 R. 124	508 14	995 138	1,133	999	496	433	952	138	75	95·68	54·35	29·19	748	21·26	...	...
71	Do. (Younger)... ...	25,811	226·41	1	P. 401 R. 11	397 4	798 15	813	798	433	275	708	15	8	88·72	53·33	27·74	722	27·97	...	...
72	Mudhol	52,163	144·10	1	P. 967 R. 4	964 ...	1,931 4	1,935	1,931	1,574	333	1,911	4	2	98·96	50·00	36·67	1,664	31·90	...	...
73	Bámdurg	29,570	211·21	1	P. 496 R. 48	508 4	1,004 52	1,056	1,004	707	234	951	52	18	94·72	34·62	32·77	873	29·52	...	...
	Total ...	509,980	192·81	16	P. 8,205 R. 304	8,125 55	16,330 359	1,043	16,345	10,677	4,634	15,438	359	213	94·54	59·33	30·69	12,956	25·40	...	...
	UNDER THE DHÁRWÁR AGENCY—																				
74	Savanúr State	14,763	210·90	1	P. 940 R. 32	1,005 8	1,945 40	1,985	1,945	1,058	829	1,916	40	25	98·51	62·50	131·48	892	60·42	...	...
75	KOLHÁPUR STATES	800,189	284·16	13	P. 12,641 R. 1,226	12,280 145	24,921 1,371	2,022	24,996	16,759	7,136	24,110	1,371	946	96·75	69·00	31·31	20,322	25·40	...	...
	TOTALS BY ESTABLISHMENTS IN SOUTHERN REGISTRATION DISTRICT.																				
	Municipal	161,140	9,768·20	8	P. 4,052 R. 351	3,873 49	7,925 400	1,041	7,939	5,758	1,408	7,362	400	286	92·90	71·50	47·46	6,053	40·37	71	0·51
	Local Fund	2,646,114	140·43	53	P. 43,513 R. 2,262	41,910 697	85,423 2,959	1,668	85,524	48,920	30,848	81,767	2,961	2,006	95·72	67·79	31·66	66,270	24·09	1,111	0·42
	Native State	1,324,932	239·55	30	P. 21,786 R. 1,562	21,410 208	43,196 1,770	1,499	43,286	28,494	12,599	41,464	1,770	1,184	95·99	66·89	32·19	34,170	25·79	...	...
	Grand Total ...	4,132,186	169·42	91	P. 69,351 R. 4,175	67,193 954	136,544 5,129	1,557	136,749	83,172	44,855	130,593	5,131	3,476	95·64	67·77	32·45	106,493	25·77	1,182	0·29
	THE EASTERN GUJARA'T REGISTRATION DISTRICT.																				
	SURAT COLLECTORATE—																			2	0·15
76	Bulsár Town	13,229	5,291·60	...	.....	...	...	*Vide* Statement		No. III.	...	...	...	...	...	...	...	...	...		
77	Surat do.	109,844	36,614·66	2	P. 1,656 R. 48	1,618 1	3,274 49	1,661	3,276	2,786	407	3,202	49	10	97·80	20·41	29·24	2,657	24·19	178	1·62

78	In the 8 Rural Circles, Local Fund	491,125	296·39	9	P. 8,012 R. 49	7,946 27	15,958 76	1,782	16,016	9,035	5,950	15,369	76	45	96·31	59·21	31·39	13,255	26·99	121	0·25
	Total ...	614,198	369·44	11	P. 9,668 R. 97	9,564 28	19,232 125	1,760	19,292	11,821	6,357	18,571	125	55	96·56	44·00	30·33	15,912	25·91	301	0·49
	BROACH COLLECTORATE—																				
79	Broach City	37,281	22133·43	1	P. 509 R. 111	547 1	1,056 112	1,168	1,056	829	161	998	112	38	94·51	33·93	27·79	1,012	27·15	20	0·54
80	Jambusar Town, Local Fund.	11,479	21110·80	...	189	181	370	370	370	229	119	352	...	...	95·14	...	36·65	148	12·89	...	...
81	In the 6 Rural Circles, Local Fund	278,170	191·73	5	P. 3,832 R. 455	3,771 69	7,603 524	1,625	7,697	5,628	1,606	7,289	524	350	95·87	66·79	27·46	8,26	29·73	10	0·04
	Total ...	326,930	224·99	6	P. 4,530 R. 566	4,499 70	9,029 636	1,611	9,123	6,686	1,886	8,639	636	388	95·68	61·01	27·61	9,429	28·84	30	0·09
	KAIRA COLLECTORATE—																				
82	Borsad Town	12,228	64146·89	...	.....	...	...	Vide	Statement No.	III.		...	...	...	...	...	...	...	...	2	0·16
83	Kapadvanj Town	14,442	63307·40	...	.....	...	...	...	Ditto.			...	...	...	...	...	...	...	...	9	0·62
84	Nadiád do.	28,304	85044·88	1	P. 531 R. 47	413 ...	944 47	991	947	719	168	889	47	23	94·17	48·94	32·22	919	32·47	...	...
85	Kaira do. Local Fund.	12,640	44942·22	...	P. 171 R. 1	156 2	327 3	330	327	226	82	309	3	1	94·50	33·33	24·53	299	23·66	1	0·08
86	In the 7 Rural Circles, Local Fund	737,186	458·57	10	P. 12,713 R. 53	10,717 9	23,430 62	2,349	23,479	17,584	5,302	22,954	62	42	97·97	67·74	31·19	19,370	26·28	28	0·04
	Total ...	804,800	500·31	11	P. 13,415 R. 101	11,286 11	24,701 112	2,256	24,753	18,529	5,552	24,152	112	66	97·78	58·93	30·09	20,588	25·58	40	0·05
	PANCH MAHÁLS—																				
87	Godhra Town	13,342	79802·62	...	P. 247 R. 312	226 6	473 318	791	473	385	80	468	318	192	98·94	60·38	49·47	119	8·92	6	0·45
88	Dohad do. Local Fund ...	12,394	74132·64	...	P. 189 R. 8	139 2	328 10	338	328	241	82	325	10	5	99·09	50·00	26·62	408	32·92	2	0·16
89	In the 5 Rural Circles, Local Fund	229,743	142·43	6	P. 4,548 R. 118	4,549 56	9,097 174	1,545	9,117	6,105	2,443	8,789	174	143	96·61	82·18	38·88	7,414	32·27	15	0·07
	Total ...	255,479	158·35	6	P. 4,984 R. 438	4,914 64	9,898 502	1,733	9,918	6,731	2,605	9,582	502	340	96·81	67·73	38·84	7,941	31·08	23	0·09
	AHMEDABAD COLLECTORATE—																				
90	Dholka Town	17,716	23621·33	1	P. 335 R. 61	309 ...	644 61	705	644	576	26	606	61	36	94·10	59·02	36·24	575	32·46	...	...
91	Ahmedabad City	124,767	57722·57	2	P. 2,053 R. 50	1,956 9	4,009 59	2,038	4,025	3,401	524	3,931	62	41	98·05	69·49	31·84	4,120	33·02	1	0·01
92	Ahmedabad Cantonment ...	2,854			6	2	8		8	8	...	8	...	...	100·	...	2·80	71	24·88	...	...
93	Gogha Town, Local Fund ...	7,063	9417·33	...	P. 126 R. ...	116 1	242 1	243	242	192	49	242	1	...	100·	...	34·26	276	39·08	2·	0·28
94	Viramgám Town, Local Fund.	18,990	30925·19	...	P. 275 R. 3	241 ...	516 3	519	516	437	63	500	3	1	96·90	33·33	26·38	545	28·70	4	0·21
95	In the 7 Rural Circles. Municipal ...	684,934	179·45	11	P. 95 R. 5	89 ...	184 5	189	184	167	12	179	5	2	97·28	40·00	0·26	20,017	29·22	64	0·09
	Local Fund .				P. 11,432 R. 134	10,518 38	21,950 172	2,011	22,046	17,850	3,578	21,472	173	101	97·82	58·72	31·50				
	Total ...	856,324	224·10	14	P. 14,322 R. 253	13,231 48	27,553 301	1,990	27,665	22,631	4,252	26,938	305	181	97·77	60·13	31·67	25,604	29·90	71	0·08
96	Rewa Kántha States	543,452	113·41	12	P. 9,507 R. 138	8,916 45	18,423 183	1,550	18,455	8,001	9,086	18,025	183	138	97·84	75·41	33·42	15,574	28·66	...	...
97	Mahi Kántha States	517,485	46·84	8	P. 7,139 R. 21	6,470 6	13,609 27	1,704	13,666	7,982	5,283	13,326	27	18	97·92	66·67	25·79	10,461	20·22	...	...
98	Cambay	86,074	245·93	1	P. 1,171 R. 12	991 3	2,162 15	2,177	2,174	768	1,247	2,082	17	7	96·30	46·67	24·27	1,412	16·40	...	...
99	Surat Agency . Dharampor .	101,289	127·57	2		1,904	1,914	3,818	1,909	3,818	664	2,674	3,661	...	...	95·89	...	36·14	2,822	27·87	...	...
100	Bánsda ...	34,122	88·86	1	P. 614 R. 10	632 10	1,246 20	1,266	1,252	667	490	1,236	20	16	99·20	80·00	36·69	1,205	35·31	...	...
101	Sachín Local Fund ...	15,721	374·31	...	P. 191 R. 4	195 ...	386 4	390	386	231	138	372	4	3	96·37	75·00	23·85	474	30·15	...	...
102	Jámbughoda Local Fund ...	6,440	45·03	...	30	29	59	59	59	36	17	54	...	...	91·53	...	8·39	173	26·86	...	...

Statement No. I, showing Particulars of Vaccination, &c.—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census o 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinations.				Re-vaccinations.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	TOTALS BY ESTABLISHMENTS IN EASTERN GUJARÁT REGISTRATION DISTRICT.				Males.	Females.	Total.														
	Municipal	320,766	40205·69	7	P. 5,185 R. 322	4,934 11	10,119 333	1,493	10,140	8,486	1,298	9,813	336	150	96·98	45·05	31·06	9,548	29·77	199	0·62
	Local Fund	2,659,126	247·60	41	P. 41,955 R. 1,137	38,784 210	80,739 1,347	2,002	81,056	58,179	19,509	78,495	1,348	883	97·22	65·55	31·02	70,573	27·58	266	0·10
	Native State	1,282,422	73·84	24	P. 20,335 R. 181	18,923 64	39,258 245	1,646	39,365	18,082	18,780	38,330	247	179	97·64	73·06	30·03	31,474	24·54	...	...
	Grand Total ...	4,162,314	150·20	72	P. 67,475 R. 1,640	62,641 285	130,116 1,925	1,834	130,561	84,747	39,587	126,638	1,931	1,212	97·33	62·96	30·72	111,595	26·81	465	0·11
	THE WESTERN GUJARÁT CIRCLE—KATHIA'WA R STATES.																				
103	Jhálávád Pránt. Limbdi	43,063	153·80	1	P. 1,458 R. 341	1,431 220	2,889 561	3,450	2,894	1,606	772	2,398	561	187	83·00	33·33	60·03	1,803	41·87	...	...
104	Jhálávád Pránt. Dhrángadra	99,686	87·29	1	P. 1,179 R. 175	1,186 108	2,365 283	2,648	2,368	1,638	683	2,337	283	248	98·92	87·63	25·93	2,246	22·53	...	...
105	Jhálávád Pránt. In four other States...	296,880	103·44	4	P. 5,036 R. 1,676	4,844 1,074	9,880 2,750	3,157	9,885	6,540	2,784	9,366	2,750	1,812	94·80	65·89	37·65	9,419	31·73	...	...
	Total ...	439,629	102·43	6	P. 7,673 R. 2,192	7,461 1,402	15,134 3,594	3,121	15,147	9,784	4,239	14,101	3,594	2,247	93·47	62·52	37·19	13,468	30·63	...	...
106	Hálár Pránt. Rájkot	61,809	229·77	1	P. 1,207 R. 379	1,224 32	2,431 411	2,959	2,433	1,811	550	2,371	411	370	97·53	90·02	44·34	2,593	41·95	...	...
107	Hálár Pránt. Do. Cantonment...	6,013	2696·41			64	53	117		117	98	17	115	...	...	98·29	...	19·13	193	32·10	...	...
108	Hálár Pránt. Gondal	135,604	197·41	2	P. 2,269 R. 674	2,171 493	4,440 1,167	2,803	4,440	2,911	1,127	4,064	1,167	643	91·53	55·10	34·72	3,976	29·32	...	...
109	Hálár Pránt. Morvi	89,964	121·57	1	P. 1,518 R. 571	1,372 350	2,890 921	3,811	2,902	2,127	491	2,628	923	618	90·93	67·10	36·08	2,670	29·68	...	...
110	Hálár Pránt. Navánagar	316,147	93·16	3	P. 3,618 R. 1,444	3,575 1,148	7,193 2,592	3,262	7,198	3,610	2,376	6,046	2,592	1,494	84·05	57·64	23·85	6,813	21·55	...	...
111	Hálár Pránt. In three other States.	74,790	207·13	3	P. 3,735 R. 559	3,616 362	7,351 921	2,757	7,364	4,524	2,313	6,863	921	683	93·36	74·15	100·81	6,639	88·77	...	...
	Total ..	684,327	116·93	10	P. 12,411 R. 3,627	12,011 2,385	24,422 6,012	3,043	24,454	15,081	6,874	22,087	6,014	3,808	90·44	63·34	37·84	22,884	33·44	...	...

112	Sorath Prant.	Junágad	387,499	101·97	4	P. 4,353 R. 558	4,034 430	8,387 988	2,344	8,392	41,119	3,045	7,297	988	543	87·00	54·96	20·23	6,741	17·40	...	...
113		Jetpur	92,553	165·27	1	P. 1,265 R. 59	1,289 80	2,554 139	2,693	2,554	1,670	603	2,291	139	90	89·70	64·77	25·73	1,724	18·63	...	...
114		Porbandar	71,072	125·42	1	P. 887 R. 842	843 689	1,730 1,531	3,261	1,730	837	403	1,328	1,531	591	76·76	38·60	27·00	1,787	25·14	...	...
115		Bántva	38,517	189·46	1	P. 1,292 R. 453	1,253 294	2,545 747	3,292	2,545	1,234	1,160	2,509	747	677	98·59	90·63	82·72	2,604	67·61	...	...
116		In four other States.	50,139	196·74	4	P. 4,450 R. 1,562	4,371 1,152	8,821 2,714	2,884	8,829	5,430	3,004	8,481	2,714	2,196	96·15	80·91	212·95	8,150	162·55	...	...
		Total ...	639,780	118·81	11	P. 12,247 R. 3,474	11,790 2,645	24,037 6,119	2,741	24,050	13,290	8,215	21,906	6,119	4,097	91·13	66·95	40·65	21,006	32·83	...	...
117	Gohelvád Prant.	Bhávnagar... ...	420,708	147·10	6	P. 7,222 R. 764	6,830 485	14,052 1,249	2,550	14,077	8,193	4,634	12,937	1,249	841	92·97	67·33	32·75	12,618	29·99	...	...
118		Pálitána	62,122	203·08	1	P. 1,030 R. 37	1,086 17	2,116 54	2,170	2,119	1,082	582	1,670	54	22	78·92	40·74	27·24	1,847	29·73	...	...
119		Vala	68,296	151·10	1	P. 1,012 R. 28	988 13	2,000 41	2,041	2,000	1,241	354	1,606	41	6	80·30	14·63	23·60	1,728	25·30	...	...
120		Jasdan	29,037	263·97	1	P. 1,044 R. 191	1,031 143	2,075 334	2,409	2,088	855	969	1,842	334	174	88·77	52·10	69·43	1,565	53·00	...	...
		Total ...	580,163	155·66	9	P. 10,308 R. 1,020	9,935 658	20,243 1,678	2,436	20,284	11,371	6,539	18,055	1,678	1,043	89·19	62·16	32·92	17,758	30·61	...	...
		Káthiáwár States, Total ...	2,343,899	147·69	36	P. 42,639 R. 10,313	41,197 7,090	83,836 17,403	2,812	83,935	49,526	25,867	76,149	17,405	11,195	90·83	64·33	37·26	75,116	32·05	...	...
	PÁLANPUR STATES—																					
121		Deesa	49,821	57·66	1	P. 1,186 R. 10	1,069 7	2,255 17	2,418	2,271	1,269	677	1,960	19	11	86·92	64·71	39·56	2,072	41·59	...	...
122		Do. Cantonment	8,376	33295·90		P. 74 R. 2	70 ...	144 2		144	87	12	99	2	...	68·76	...	11·82	335	39·99	...	...
123		Pálanpur	184,581	80·75	2	P. 3,012 R. 119	2,905 109	5,917 228	3,072	5,921	4,008	1,706	5,715	228	133	96·59	58·33	31·68	4,879	26·43	...	...
124		Rádhanpur	98,129	85·33	1	P. 1,271 R. 43	1,184 42	2,455 85	2,540	2,455	1,623	744	2,392	85	76	97·43	89·42	25·15	1,715	17·48	...	...
125		In three other States	235,571	63·67	3	P. 4,233 R. 509	4,127 559	8,360 1,068	3,143	8,360	4,867	3,162	8,048	1,068	825	96·27	77·25	37·67	7,577	32·16	...	...
		Total ...	576,478	72·06	7	P. 9,776 R. 683	9,355 717	19,131 1,400	2,933	19,151	11,854	6,301	18,214	1,402	1,045	95·21	74·64	33·41	16,578	28·76	...	...
	TOTALS BY ESTABLISHMENTS IN WESTERN GUJARÁT CIRCLE.																					
		Government	126,019	110·98	2	P. 2,531 R. 391	2,416 39	4,947 430	2,688	4,965	3,265	1,256	4,545	432	381	91·87	88·61	39·09	5,192	41·20	...	...
		Native State	2,794,358	106·98	41	P. 49,884 R. 10,605	48,136 7,768	98,020 18,373	2,839	98,121	58,115	30,912	89,818	18,375	11,859	91·63	64·55	36·38	86,502	30·96	...	...
		Grand Total ...	2,920,377	107·14	43	P. 52,455 R. 10,996	50,552 7,807	1,02,967 18,803	2,832	1,03,086	61,380	32,168	94,363	18,807	12,240	91·64	65·10	36·50	91,694	31·40	...	...
	THE SIND REGISTRATION DISTRICT.																					
126	KARÁCHI COLLECTORATE—																					
		Karáchi Town	68,332	3416·60	2	P. 1,865 R. 733	1,708 130	3,573 863	2,218	3,602	3,084	346	3,541	863	503	99·10	58·28	59·18	5,051	73·92	24	0·35
127		In the 13 Rural Circles, Local Fund	410,356	29·11	10	P. 6,987 R. 1,090	5,939 1,556	12,926 2,646	1,557	12,941	8,797	3,455	12,592	2,646	1,912	97·42	72·26	35·34	14,058	34·26	141	0·34
		Total ...	478,688	33·91	12	P. 8,852 R. 1,823	7,647 1,686	16,499 3,509	1,667	16,543	11,881	3,801	16,133	3,509	2,415	97·78	68·82	38·75	19,109	30·92	165	0·34

Statement No. I, showing Particulars of Vaccination, &c.—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinations. Total.	Primary Vaccinations. Successful. Under 1 year.	Primary Vaccinations. Successful. Over 1 and under 6 years.	Primary Vaccinations. Successful. Total of all Ages.	Re-vaccinations. Total.	Re-vaccinations. Successful.	Percentage of Successful Cases. Primary.	Percentage of Successful Cases. Re-vaccination.	Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years. Number.	Average Annual Number of Persons successfully vaccinated during previous five years. Ratio per 1,000.	Average Annual Number of Deaths from Small-pox during previous five years. Number.	Average Annual Number of Deaths from Small-pox during previous five years. Ratio per 1,000.
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE SIND REGISTRATION DISTRICT—*continued.*				Males.	Females.	Total.														
	HYDERABAD COLLECTORATE—																				
128	Hyderabad Town	45,195	...	1	P. 784 R. 226	561 ...	1,345 226	1,571	1,345	978	335	1,328	226	201	98·74	88·94	33·83	1,855	41·04	42	0·93
129	In the 13 Rural Circles, Local Fund	709,429	78·57	13	P. 11,474 R. 1,181	9,530 409	21,004 1,590	1,738	21,063	15,580	4,310	20,169	1,590	1,049	96·02	65·97	29·91	22,632	31·90	262	0·37
	Total ...	754,624	83·57	14	P. 12,258 R. 1,407	10,091 409	22,349 1,816	1,726	22,408	16,558	4,645	21,497	1,816	1,250	96·19	68·83	30·14	24,487	32·45	304	0·40
	THAR AND PÁRKAR—																				
130	Umarkot Town...	2,828	...	...	.....	...	...	*Vide* Statement	No. III.	...	...	...	...	...	...	...	...	...	..	...	...
131	In the 7 Rural Circles, Local Fund	200,516	15·75	7	P. 5,349 R. 634	4,626 2,251	9,975 2,885	1,837	9,980	6,638	3,088	9,833	2,885	2,246	98·58	77·85	60·24	13,357	66·61	15	0·07
	Total ...	203,344	15·97	7	P. 5,349 R. 634	4,626 2,251	9,975 2,885	1,837	9,980	6,638	3,088	9,833	2,885	2,246	98·58	77·85	59·40	13,357	65·69	15	0·07
	SHIKÁRPUR COLLECTORATE—																				
132	Shikárpur Town	42,496	4,473·26	1	P. 809 R. 953	683 11	1,492 964	2,456	1,493	1,257	164	1,423	964	606	95·71	62·86	47·86	1,922	45·23	10	0·24
133	Sukkur do.	27,389	9,129·66	2	P. 1,090 R. 404	460 444	1,550 848	1,199	1,551	1,075	373	1,486	848	754	95·87	88·92	81·78	2,589	94·53	4	0·15
134	Lárkhána do.	13,188	2,198·	1	P. 283 R. 34	191 21	474 55	529	474	427	43	472	55	46	99·58	83·64	39·28	422	32·00	...	...
135	In the 15 Rural Circles, Local Fund	751,551	76·76	16	P. 13,382 R. 1,966	11,439 3,583	24,821 5,549	1,898	24,949	19,744	3,871	23,793	5,570	3,653	95·86	65·83	36·52	29,458	39·20	88	0·12
	Total ...	834,624	85·09	20	P. 15,564 R. 3,357	12,773 4,059	28,337 7,416	1,788	28,467	22,503	4,451	27,179	7,437	5,059	95·91	68·22	38·63	34,391	41·21	102	0·12
	UPPER SIND FRONTIER—																				
136	Jacobabad Town and Cantonment.	11,352	...	...	.....	...	...	*Vide* Statement	No. III.	...	...	...	...	...	...	...	...	...	...	1	0·09
137	In the 4 Rural Circles, Local Fund	131,191	56·28	4	P. 3,032 R. 728	2,622 1,920	5,654 2,648	2,075	5,673	3,774	1,540	5,366	2,648	1,785	94·91	67·41	54·51	6,256	47·69	11	0·08
	Total ...	142,543	61·16	4	P. 3,032 R. 728	2,622 1,920	5,654 2,648	2,075	5,673	3,774	1,540	5,366	2,648	1,785	94·91	67·41	50·17	6,256	43·89	12	0·08
	NATIVE STATE—																				
138	Khairpur State...	129,153	21·14	3	P. 2,547 R. 86	2,041 47	4,588 133	1,574	4,603	2,694	1,279	4,462	134	91	97·25	68·42	35·25	2,822	21·85	...	...

	TOTALS BY ESTABLISHMENTS IN SIND REGISTRATION DISTRICT.																				
	Municipal	196,600	5,782·35	7	P. 4,831 R. 2,350	3,603 606	8,434 2,956	1,627	8,465	6,821	1,261	8,255	2,956	2,110	97·88	71·38	52·72	11,839	60·22	80	0·41
	Local Fund	2,217,223	46·21	50	P. 40,224 R. 5,599	34,156 9,719	74,380 15,318	1,794	74,606	54,533	16,264	71,753	15,339	10,645	96·47	69·49	37·16	85,761	38·68	518	0·23
	Native State	129,153	21·14	3	P. 2,547 R. 86	2,041 47	4,588 133	1,574	4,603	2,694	1,279	4,462	134	91	97·25	68·42	35·25	2,822	21·85	...	...
	Grand Total ...	2,542,976	46·99	60	P. 47,602 R. 8,035	39,800 10,372	87,402 18,407	1,763	87,674	64,048	18,804	84,470	18,429	12,846	96·65	69·79	38·27	100,422	39·49	598	0·24
	THE BARODA CIRCLE.																				
139	Baroda States	2,185,005	254·96	31	P. 34,391 R. 1,401	31,600 667	65,991 2,068	2,195	66,175	54,404	8,634	63,502	2,070	1,736	96·23	83·95	29·86	60,295	27·59	...	...
	THE CUTCH CIRCLE.																				
140	Cutch States	512,084	78·78	17	P. 10,873 R. 168	10,046 28	20,919 196	1,242	21,110	14,295	6,064	20,710	201	140	99·00	71·43	40·72	19,275	37·64	...	...
	ADEN.																				
141	Aden Municipality	34,860	2,962·07	1	417	193	610	610	610	95	290	583	...	...	95·57	...	16·72	565	16·21	...	...
142	KHELAT	...	...	...	P. 357 R. 9	278 3	635 12	647	635	421	181	614	12	12	96·69	100·	...	...	...	...	...
	TOTAL OF THE BOMBAY PRESIDENCY. BY ESTABLISHMENTS.																				
	Government	126,019	110·98	2	P. 2,531 R. 391	2,416 39	4,947 430	2,688	4,965	3,265	1,256	4,545	432	381	91·88	88·60	39·09	5,192	41·20	...	...
	Municipal..	1,841,220	15,856·18	45	P. 29,988 R. 4,551	28,095 841	58,083 5,392	1,411	58,436	44,373	10,303	55,631	5,395	3,604	95·78	66·84	32·17	62,697	34·55	937	0·52
	Cantonment	40,350	4,593·38	1	P. 888 R. 247	630 60	1,518 307	1,825	1,528	1,109	328	1,442	307	156	94·99	50·81	39·60	1,457	36·11	13	0·32
	Local Fund	14,629,865	117·80	268	P.242,900 R. 10,555	228,889 11,390	471,789 21,945	1,842	472,741	310,929	138,232	454,756	21,969	15,333	96·39	69·87	32·13	416,347	28·29	5,404	0·37
	Native State	8,978,074	112·64	160	P.151,288 R. 14,585	143,138 9,180	294,426 23,765	1,989	295,230	189,414	86,138	279,746	23,777	15,696	95·01	66·05	32·91	2,52,459	28·31	...	...
	In British Territory ...	16,503,663	132·95	315	P.273,693 R. 15,351	257,513 12,291	531,206 27,642	1,774	532,521	356,329	148,737	511,617	27,669	19,090	96·31	69·06	32·16	480,118	29·09	6,354	0·39
	In Native State Territory	9,111,865	112·46	161	P.153,902 R. 14,978	145,655 9,219	299,557 24,197	2,011	300,379	192,761	87,529	284,503	24,211	16,080	94·97	66·45	32·99	258,034	28·32	...	...
	GRAND TOTAL ...	25,615,528	124·86	476	P.427,595 R. 30,329	403,168 21,510	830,763 51,839	1,854	832,900	549,090	236,257	796,120	51,880	35,170	95·83	67·84	32·45	738,152	28·82	6,354	0·25

STATEMENT No. II, showing the Cost of the Department

No.	Circles and Districts.	Establishment.																		
		Deputy Sanitary Commissioners.	Superintendents of Vaccination.	Inspectors of Sanitation and Vaccination.			Assistant Superintendents of Vaccination.			Clerks and Kárkúns.	Vaccinators.									Hávaldárs and Peons.
				1st Class.	2nd Class.	3rd Class.	1st Class.	2nd Class.	3rd Class.		Government.	Municipal.	Cantonment.	Local Fund. 1st Class.	Local Fund. 2nd Class.	Local Fund. 3rd Class.	Local Fund. Candidates.	Native States.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		20
	THE WESTERN REGISTRATION DISTRICT.																			
	Administrative Charges	1	..	1	1	4	..	..	..	2	..	..	..	..	..	..	..	..		10
1	Khándesh Collectorate	..	..	..	..	..	..	..	..	..	..	1	..	1	7	17	..	..		26
2	Násik do.	..	..	..	..	..	..	..	..	..	..	1	..	1	3	6	..	..		13
3	Thána do.	..	..	..	..	..	..	..	..	..	..	2	..	1	5	6	1	1		14
4	Kolába do.	..	..	..	..	..	..	..	..	..	..	2	..	1	3	5	1	2		10
	Total ..	1	..	1	1	4	..	..	..	2	..	6	..	4	20	34	2	3		72
	THE PRESIDENCY CIRCLE.																			
	Administrative Charges	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		
5	Bombay	..	..	..	..	..	1	..	..	17	..	9	..	..	..	..	..	..		3
	Total ..	..	1	..	..	..	1	..	..	17	..	9	..	..	..	..	..	..		3
	THE CENTRAL REGISTRATION DISTRICT.																			
	Administrative Charges	1	..	1	2	3	..	..	..	2	..	..	..	..	..	..	..	..		10
6	Ahmednagar Collectorate ..	..	..	..	..	..	..	..	..	..	..	1	..	1	5	6	1	..		12
7	Poona do.	..	..	..	..	..	..	..	..	..	..	2	1	1	5	5	1	..		17
8	Sholápur do.	..	..	..	..	..	..	..	..	..	..	3	..	1	3	5	1	1		13
9	Sátára do.	..	..	..	..	..	..	..	..	..	..	1	..	1	5	12	2	6		24
10	Ratnágiri do.	..	..	..	..	..	..	..	..	..	..	1	..	1	6	6	1	5		16
	Total ..	1	..	1	2	3	..	..	..	2	..	8	1	5	24	37	6	10		93
	THE SOUTHERN REGISTRATION DISTRICT.																			
	Administrative Charges	1	..	1	1	2	..	..	..	2	..	..	..	..	..	..	..	..		
1	Belgaum Collectorate	..	..	..	..	..	..	..	..	..	..	3	..	1	3	11	1	..		9
12	Dhárwár do.	..	..	..	..	..	..	..	..	..	..	3	..	1	5	11	1	1		16
13	Bijápur do.	..	..	..	..	..	..	..	..	..	..	1	..	1	3	4	1	..		21
14	Kánara do.	..	..	..	..	..	..	..	..	..	..	1	..	1	3	9	1	..		9
15	Kolháپur States	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	13		13
16	Southern Marátha Jághirs ..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	16		17
	Total ..	1	..	1	1	3	..	..	1	2	..	8	..	4	14	35	4	30		93
	THE EASTERN GUJARA'T REGISTRATION DISTRICT.																			
	Administrative Charges	1	..	1	1	3	..	..	..	2	..	..	..	..	..	..	..	..		9
17	Surat Collectorate	..	..	..	..	..	..	..	..	..	..	2	..	1	3	5	1	3		14
18	Broach do.	..	..	..	..	..	..	..	..	..	..	1	..	1	1	3	1	..		6
19	Kaira do.	..	..	..	..	..	..	..	..	..	..	1	..	1	3	6	1	1		13
20	Panch Mahals	..	..	..	..	..	..	..	..	..	..	..	..	1	2	3	..	..		6
21	Ahmedabad Collectorate ..	..	..	..	..	..	..	..	..	..	..	3	..	1	3	7	1	..		14
22	Mahi Kántha Agency ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8		3
23	Rewa Kántha do. ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12		12
	Total ..	1	..	1	1	3	..	..	..	2	..	7	..	5	12	24	4	24		82
	THE WESTERN GUJARA'T CIRCLE.																			
	Administrative Charges	..	1	..	..	..	..	1	1	2	..	..	..	..	..	..	..	..		6
24	Káthiáwár	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	36		37
25	Pálanpur	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	6		7
	Total ..	..	1	..	..	..	..	1	1	2	2	..	..	..	..	..	..	42		50
	THE SIND REGISTRATION DISTRICT.																			
	Administrative Charges	1	1	1	1	4	..	..	..	2	..	..	..	..	..	..	..	..		10
26	Karáchi Collectorate	..	..	..	..	..	..	..	..	..	..	2	..	1	4	5	1	..		10
27	Hyderabad do.	..	..	..	..	..	..	..	..	..	..	1	..	2	5	6	1	..		14
28	Thar and Párkar	..	..	..	..	..	..	..	..	..	..	..	..	1	2	4	1	..		7
29	Shikárpur Collectorate ..	..	..	..	..	..	..	..	..	..	..	4	..	1	6	9	1	3		23
30	Upper Sind Frontier ..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	1	..		4
	Total ..	1	1	1	1	4	..	..	..	2	..	7	..	6	18	26	5	3		68
	THE BARODA CIRCLE.																			
31	Baroda States	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	31		34
	THE CUTCH CIRCLE.																			
32	Cutch States	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	17		19
	IN THE ADEN MUNICIPALITY.																			
33	Aden	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..		1
34	KHELAT	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..
	TOTAL FOR THE BOMBAY PRESIDENCY	5	3	6	7	18		1	2	29	2	46	1	24	88	156	21	160		520

in the Bombay Presidency during the year 1885-86.

Expenditure.				Paid from								
Pay of Establishment.	Travelling Allowances.	Contingencies.	Total Cost.	Provincial Funds.	Local Funds.	Municipal Funds.	Cantonment Funds.	Native State Funds.	Total.	Number of all successful Vaccinations and Re-vaccinations.	Average Cost of each successful Case.
21	22	23	24	25	26	27	28	29	30	31	32
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.
14,323 10 10	1,966 9 7	1,054 0 6	17,344 4 11	17,344 4 11	....	....	....	....	17,344 4 11	....	....
6,858 1 11	4 8 0	272 2 0	7,134 12 8	....	6,894 12 8	240 0 0	....	....	7,134 12 8	36,804	0 3 1
3,606 0 9	3 0 0	138 11 0	3,747 11 9	....	3,441 3 9	266 0 0	40 8 0	....	3,747 11 9	18,846	0 3 2
3,855 14 8	....	256 8 3	4,112 6 11	....	3,285 6 11	479 0 0	....	348 0 0	4,112 6 11	10,470	0 3 5
3,066 14 5	14 1 1	165 5 11	3,246 5 5	....	2,689 0 0	83 10 8	....	473 10 9	3,246 5 5	15,203	0 3 2
31,710 10 7	1,988 2 8	1,886 12 6	35,585 9 8	17,344 4 11	16,310 7 4	1,068 10 8	40 8 0	821 10 9	35,585 9 8	91,323	0 6 3
3,211 18 6	322 15 8	8 15 0	3,543 12 2	3,543 12 2	....	....	....	....	3,543 12 2	....	....
9,004 9 8	....	7,342 8 8	16,347 2 4	....	....	16,347 2 4	....	....	16,347 2 4	16,434	0 15 11
12,215 7 2	322 15 8	7,351 7 8	19,890 14 6	3,543 12 2	....	16,347 2 4	....	....	19,890 14 6	16,434	1 3 4
18,135 15 0	2,094 8 2	1,184 0 11	21,404 8 1	21,284 8 1	....	....	....	120 0 0	21,404 8 1	....	....
3,644 14 9	....	97 4 5	3,742 3 2	....	3,442 6 2	299 13 0	....	....	3,742 3 2	29,313	0 2 1
5,092 0 0	....	547 14 3	5,639 14 3	....	4,162 2 9	889 11 0	588 0 6	....	5,639 14 3	27,586	0 3 3
3,910 5 6	44 0 0	173 15 3	4,028 4 9	....	2,692 15 2	865 4 7	....	370 1 0	4,028 4 9	26,638	0 2 5
5,780 0 11	....	365 2 8	6,145 3 7	....	4,545 11 10	293 5 6	....	1,306 2 3	6,145 3 7	48,346	0 2 0
4,337 0 1	16 0 0	208 14 0	4,561 14 1	....	3,910 4 8	52 9 0	....	599 0 5	4,561 14 1	38,495	0 1 11
40,799 4 3	2,154 8 2	2,577 3 6	45,521 15 11	21,284 8 1	18,753 8 7	2,500 11 1	588 0 6	2,395 3 8	45,521 15 11	1,70,398	0 4 3
16,064 13 0	2,217 14 0	1,707 14 0	19,990 9 0	19,990 9 0	....	....	....	....	19,990 9 0	....	....
4,293 11 3	....	286 8 4	4,580 3 7	....	4,150 8 7	429 11 0	....	....	4,580 3 7	20,524	0 2 6
5,835 7 3	....	506 9 10	6,342 1 1	....	5,477 10 6	587 12 1	....	276 10 6	6,342 1 1	33,435	0 3 0
2,441 1 8	....	169 3 0	2,610 4 8	....	2,502 4 8	108 0 0	....	....	2,610 4 8	20,638	0 2 9
3,692 13 2	....	181 7 3	3,874 4 5	....	3,744 7 7	129 12 10	....	....	3,874 4 5	9,945	0 6 3
4,133 5 11	....	181 12 6	4,315 2 5	....	....	....	....	4,315 2 5	4,315 2 5	25,056	0 2 9
4,116 12 9	....	183 1 2	4,299 13 11	....	....	....	....	4,299 13 11	4,299 13 11	15,651	0 4 5
40,578 1 0	2,217 14 0	3,216 8 1	46,012 7 1	19,990 9 0	15,874 15 4	1,255 3 11	....	8,891 10 10	46,012 7 1	1,34,069	0 5 6
15,502 14 8	2,104 14 3	1,229 4 5	18,837 1 4	18,837 1 4	....	....	....	....	18,837 1 4	....	....
3,939 6 6	....	345 14 10	4,285 5 4	....	2,820 6 9	682 8 7	....	782 6 0	4,285 5 4	23,014	0 2 10
1,704 13 8	....	213 0 2	1,917 13 10	....	1,649 10 4	268 3 6	....	....	1,917 13 10	6,027	0 3 5
3,330 12 3	1 5 0	330 0 1	3,662 1 4	....	3,081 2 4	339 7 6	....	241 7 6	3,662 1 4	26,307	0 2 3
1,721 9 3	....	179 11 3	1,901 4 6	....	1,901 4 6	....	....	....	1,901 4 6	9,576	0 3 0
3,961 12 0	....	356 19 5	4,318 6 5	....	3,431 10 3	886 12 2	....	....	4,318 6 5	27,119	0 2 7
1,761 4 11	....	116 8 3	1,877 13 2	....	....	....	....	1,877 13 2	1,877 13 2	13,344	0 2 3
2,991 11 7	....	200 3 10	3,191 15 5	....	....	....	....	3,191 15 5	3,191 15 5	18,163	0 2 10
34,914 4 10	2,106 3 3	2,971 5 3	39,991 13 4	18,837 1 4	12,884 2 2	2,176 15 9	....	6,093 10 1	39,991 13 4	1,27,850	0 5 0
10,606 12 8	1,833 11 6	513 7 6	12,953 15 8	12,353 15 8	....	....	....	600 0 0	12,953 15 8	....	....
11,463 1 3	2,090 8 4	935 0 6	14,478 9 7	251 0 0	....	....	....	14,227 9 7	14,478 9 7	87,344	0 2 8
2,003 7 0	....	31 5 6	2,034 12 6	120 7 6	....	....	120 7 6	1,793 13 6	2,034 12 6	19,259	0 1 8
24,063 4 11	3,924 3 10	1,479 13 0	29,467 5 9	12,725 7 2	....	....	120 7 6	16,621 7 1	29,467 5 9	1,06,603	0 4 5
17,457 1 7	2,920 12 3	1,242 1 8	21,619 15 6	20,187 12 4	....	1,432 3 2	....	....	21,619 15 6	....	....
3,458 4 8	816 15 5	177 9 7	4,452 13 8	....	3,814 2 1	638 11 7	....	....	4,452 13 8	18,548	0 3 10
4,367 14 9	762 12 10	230 11 6	5,360 7 1	....	5,024 7 1	336 0 0	....	....	5,360 7 1	22,747	0 3 9
2,208 8 4	427 3 6	123 10 8	2,759 6 6	....	2,759 6 6	....	....	....	2,759 6 6	12,979	0 3 8
7,087 4 4	903 11 7	421 9 4	8,471 9 3	....	5,979 12 9	1,174 12 6	....	1,317 0 0	8,471 9 3	30,791	0 3 8
1,255 6 2	278 0 10	91 5 2	1,624 12 2	....	1,624 12 2	....	....	....	1,624 12 2	7,151	0 3 8
36,824 7 10	6,169 8 5	2,295 15 11	44,289 0 2	20,187 12 4	19,202 8 7	3,581 11 3	....	1,317 0 0	44,289 0 2	97,316	0 7 3
11,858 2 5	133 8 0	170 13 0	12,162 7 5	....	....	....	....	12,162 7 5	12,162 7 5	65,238	0 3 0
3,514 15 9	2,696 7 4	39 12 7	7,251 3 8	....	....	....	....	7,251 3 8	7,251 3 8	29,850	0 5 7
420 0 0	....	....	420 0 0	....	....	420 0 0	....	....	420 0 0	563	0 11 6
....	....	....	....	....	....	....	....	....	....	626	....
2,35,690 10 9	22,712 7 4	21,989 11 5	2,80,592 13 6	1,13,913 7 0	83,025 10 0	27,350 7 0	749 0 0	55,554 5 6	2,80,592 13 6	8,31,290	0 5 5

B.—DISPENSARY VACCINATION.

Statement No. III, showing Dispensary Vaccination in the Bombay Presidency during the year 1885-86.

Districts.		Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination.				Re-vaccination.		Percentages of Successful Cases.	
								Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.
									Under 1 year.	1 and under 6.	Total of all Ages.				
1		2	3	4			5	6	7	8	9	10	11	12	13
	THE WESTERN REGISTRATION DISTRICT.			Males.	Females.	Total.									
Khándesh Collectorate.	Sháhádá	...	...	60	46	106	106	108	47	32	79	...	...	74·53	...
	Nándurbár	...	...	44	45	89	89	89	55	32	87	...	...	97·75	...
	Taloda	...	...	88	80	168	168	168	123	26	149	..	...	88·69	...
	Párola	...	...	P. 350 R. 22	279 11	629 33	662	629	548	79	629	33	31	100·	93·94
	Erandol	...	...	247	264	511	511	511	389	120	511	...	...	100·	...
	Dharamgaon... ..	...	...	P. 20 R. 15	19 ...	39 15	54	39	32	6	38	15	15	97·44	100·
	Pimpalner	...	...	P. 77 R. 1	50 ...	127 1	128	127	99	24	125	1	1	98·42	100·
	Bhadgaon	...	...	70	89	159	159	159	95	42	137	...	...	86·16	...
	Shirpur	...	...	P. 172 R. 8	155 ...	327 8	335	327	257	60	326	8	8	99·69	100·
	Total ...	...	...	P. 1,128 R. 46	1,027 11	2,155 57	246	2,157	1,645	421	2,081	57	55	96·57	96·49
Násik Collectorate.	Sinnar	...	..	124	143	267	267	269	198	56	254	...	...	95·13	...
	Dindori	...	...	66	54	120	120	120	99	10	110	..	...	91·67	...
	Yeola	...	...	P. 202 R. ...	206 1	408 1	409	408	249	145	395	1	1	96·81	100·
	Málegaon	...	...	76	57	133	133	133	28	89	118	...	...	88·72	...
	Peint	...	...	48	29	77	77	77	28	32	62	...	..	80·52	...
	Pimpalgaon B. ...	...	...	47	53	100	100	100	69	6	75	...	...	75·00	...
	Satana	...	...	90	82	172	172	172	161	10	172	...	...	100·	...
	Total ...	...	...	P. 653 R. ...	624 1	1,277 1	183	1,279	832	348	1,186	1	1	92·87	100·
Thána Collectorate.	Bándra	...	...	P. 190 R. 18	177 39	367 57	424	368	234	117	354	57	14	96·46	24·56
	Bhiwndi	...	...	169	155	324	324	324	162	79	241	...	...	74·38	...
	Chinchni	...	...	22	26	48	48	48	18	30	48	...	...	100·	...
	Kúrla	...	...	173	108	281	281	281	199	69	269	...	...	95·73	...
	Bassein	...	...	P. 96 R. 1	73 ...	169 1	170	169	93	63	159	1	1	94·08	100·
	Máhim	..	...	107	105	212	212	212	134	65	201	...	...	94·81	...
	Mátheran	...	...	3	2	5	5	5	1	1	2	...	...	40·00	...
	Sháhápur	...	...	P. 28 R. 4	21 1	49 5	54	49	28	19	47	5	4	95·92	80·00
	Umergaon	..	...	18	3	21	21	21	2	12	14	...	...	66·66	...
	Total ...	...	...	P. 806 R. 23	670 40	1,476 63	171	1,477	871	455	1,335	63	19	90·45	30·16
Kolába Collectorate.	Panvel	...	...	2	...	2	•2	2	2	...	2	...	...	100·	...
	Alibág	...	...	51	35	86	86	86	25	47	72	...	...	83·72	...
	Pen	...	...	19	17	36	36	36	23	11	34	...	...	94·44	...
	Mahád	...	...	64	51	115	115	115	68	38	107	...	...	93·04	...
	Total ...	...	...	136	103	239	60	239	118	96	215	...	...	89·96	...
	TOTAL FOR THE WESTERN REGISTRATION DISTRICT.	...	...	P. 2,723 R. 69	2,424 52	5,147 121	182	5,152	3,466	1,320	4,817	121	75	93·59	61·98
	THE PRESIDENCY CIRCLE.														
Bombay City.	Her Majesty's Common Jail ...	...	...	R. 36	...	36	36	...	...	...	...	36	20	...	55·56
	Her Majesty's House of Correction ...	...	...	R. 80	...	80	80	...	...	...	...	80	34	...	42·50
	TOTAL FOR THE PRESIDENCY CIRCLE ...	...	...	R. 116	...	116	58	...	...	...	...	116	54	...	46·55

Statement No. III, showing Dispensary Vaccination, &c.—*continued.*

Districts.		Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination.				Re-vaccination.		Percentages of Successful Cases.	
								Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.
									Under 1 year.	1 and under 6.	Total of all Ages.				
1		2	3	4			5	6	7	8	9	10	11	12	13
	THE CENTRAL REGISTRATION DISTRICT.			Males.	Females.	Total.									
Ahmednagar Collectorate.	Shevgaon	...	...	61	45	106	106	106	58	35	93	...	...	87·74	...
	Nevósa	...	...	64	65	129	129	129	92	18	110	...	...	85·27	...
	Total ...	...	...	125	110	235	117	235	150	53	203	...	...	86·38	...
Poona Collectorate.	A'landi	...	...	25	31	56	56	56	45	8	53	...	...	94·64	...
	Junnar	...	...	5	11	16	16	16	2	11	13	...	...	81·25	...
	Indápur	...	..	95	75	170	170	172	89	57	146	...	...	85·88	...
	Sásvad	..	...	84	68	152	152	152	95	53	149	...	...	98·03	...
	Jejuri	...	...	P. 57 R. 1	73 1	130 2	132	130	77	47	124	2	2	95·38	100·
	Bárámati	...	...	102	97	199	199	199	171	21	192	...	...	96·48	...
	Talegaon Dábháda...	...	...	11	17	28	28	29	6	5	11	...	...	39·28	...
	Total ...	...	...	P. 379 R. 1	372 1	751 2	108	754	485	202	688	2	2	91·61	100·
Sholápur Collectorate.	Karmála	...	...	P. 92 R. 3	111 1	203 4	207	203	159	30	189	4	4	93·10	100·
Sátára Collectorate.	Wái	...	...	P. 106 R. 1	101 ...	207 1	208	207	77	119	200	1	1	96·62	100·
	Pátan	..	...	50	45	95	95	95	78	9	87	...	...	91·58	...
	Karád	...	...	158	161	319	319	321	249	52	301	...	...	94·36	...
	Islámpur	...	...	69	54	123	123	123	82	20	102	...	...	82·93	...
	Mhasvad	...	...	P. 100 R. 4	114 ...	214 4	218	214	157	47	204	4	2	95·33	50·00
	Pusesávli	...	...	63	49	112	112	112	105	6	112	...	...	100·	...
	Tásgaon	...	...	156	151	307	307	307	201	47	248	...	...	80·78	...
	Total ...	...	...	P. 702 R. 5	675 ...	1,377 5	197	1,379	949	300	1,254	5	3	91·07	60·00
Ratnágiri Collectorate.	Dápoli	...	...	24	25	49	49	49	41	8	49	...	...	100·	...
	Vengúrla	...	...	53	43	96	96	96	47	44	93	...	...	96·88	...
	Total ...	...	...	77	68	145	72	145	88	52	142	...	...	97·93	...
Native States.	Akalkot	...	...	152	157	309	309	309	282	22	304	...	...	98·38	...
	Sávantvadi	...	...	P. 118 R. 20	96 2	214 22	236	215	154	45	206	22	13	96·26	59·09
	Native States Total..	...	...	P. 270 R. 20	253 2	523 22	272	524	436	67	510	22	13	97·51	59·09
	TOTAL FOR THE CENTRAL REGISTRATION DISTRICT	...	...	P. 1,645 R. 29	1,589 4	3,234 33	156	3,240	2,267	704	2,986	33	22	92·33	66·67

Statement No. III, showing Dispensary Vaccination, &c.—*continued.*

Districts.		Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination.				Re-vaccination.		Percentages of Successful Cases.	
									Successful.						
								Total.	Under 1 year.	1 and under 6.	Total of all Ages.	Total.	Successful.	Primary.	Re-vaccination.
1		2	3	4			5	6	7	8	9	10	11	12	13
	THE SOUTHERN REGISTRATION DISTRICT.			Males.	Females.	Total.									
Belgaum Collectorate.	Belgaum Jail ...	...	...	49	5	54	54	54	...	...	32	...	...	59·26	...
	Chikodi	...	...	43	58	101	101	101	74	24	99	...	...	98·02	...
	Saundatti	...	...	65	53	118	118	118	79	39	118	...	...	100·	...
	Gokák	...	...	117	97	214	214	214	163	49	213	...	...	99·53	...
	Athni...	...	...	53	49	102	102	102	65	36	101	...	...	99·02	...
	Total ...	...	...	327	262	589	118	589	381	148	563	...	...	95·59	...
Dhárwár Collectorate.	Háveri	...	...	43	49	92	92	92	35	57	92	...	...	100·	...
Bijápur Collectorate.	Indi	...	...	P. 101 R. 5	106 ...	207 5	212	207	160	35	197	5	1	95·17	20·00
	Shindgi	...	...	70	86	156	156	156	102	31	135	...	...	86·54	...
	Bágevádi	...	..	P. 102 R. 7	83 ...	185 7	192	185	161	20	183	7	4	98·92	57·14
	Ilkal	...	...	P. 218 R. 2	177 ...	395 2	397	395	269	118	389	2	2	98·48	100·
	Bijápur	...	...	P. 34 R. 1	31 ...	65 1	66	65	17	44	61	1	1	93·85	100·
	Muddebihál	...	...	55	66	121	121	121	77	34	115	...	...	95·04	...
	Total ...	...	...	P. 580 R. 15	549 ...	1,129 15	191	1,129	786	282	1,080	15	8	95·66	53·33
Kánara Collectorate.	Honávar	...	...	P. 101 R. ...	65 1	166 1	167	166	34	118	166	1	1	100·	100·
	Siddápur	...	...	7	3	10	10	10	4	6	10	...	...	100·	...
	Yellápur	...	...	P. 9 R. 1	7 ...	16 1	17	16	5	7	12	1	1	75·00	100·
	Haliyál	...	...	51	55	106	106	106	54	29	85	...	...	80·19	...
	Mundgod	...	...	P. 19 R. 2	29 1	48 3	51	48	26	20	47	3	3	97·92	100·
	Total ...	...	...	P. 187 R. 3	159 2	346 5	70	346	123	180	320	5	5	92·49	100·
Southern Marátha Jághirs.	Sángli	...	...	192	220	412	412	412	220	155	376	...	...	91·26	...
	Sháhapur	...	...	115	95	210	210	210	114	58	174	...	...	82·86	...
	Mangalvedha ...	...	...	P. 188 R. 32	158 ...	346 32	378	349	271	42	319	32	22	92·20	68·75
	Terdál	...	...	166	142	308	308	309	133	104	237	...	...	76·95	...
	Shirhatti	...	...	P. 91 R. 5	50 ...	141 5	146	145	110	30	140	5	3	99·29	60·00
	Koochi	...	...	28	28	56	56	61	48	6	54	...	...	96·43	...
	Miraj...	...	...	P. 108 R. 25	105 4	213 29	242	214	160	44	206	29	2	96·71	6·90
	Budgaon	...	...	P. 48 R. 5	40 2	88 7	95	88	67	18	85	7	5	96·59	71·43
	Mudhol	...	...	79	80	159	159	159	96	56	152	...	...	95·60	...
	Rámdurg	...	..	76	99	175	175	175	124	30	156	...	...	89·14	...
	Total ...	...	...	P. 1,091 R. 67	1,017 6	2,108 73	218	2,122	1,343	543	1,899	73	32	90·09	43·84
	TOTAL FOR THE SOUTHERN REGISTRATION DISTRICT.	...	...	P. 2,228 R. 85	2,036 8	4,264 93	161	4,278	2,668	1,210	3,954	93	45	92·73	48·39

Statement No. III, showing Dispensary Vaccination, &c.—*continued.*

Districts.		Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination.				Re-vaccination.		Percentages of Successful Cases.	
								Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.
									Under 1 year.	1 and under 6.	Total of all Ages.				
1		2	3	4			5	6	7	8	9	10	11	12	13
	THE EASTERN GUJARA'T REGISTRATION DISTRICT.			Males.	Females.	Total.									
Surat Collectorate.	Ránder	...	...	134	124	258	258	258	162	86	258	...	...	100·	...
	Bárdoli	...	...	67	63	130	130	130	91	37	128	...	..	98·46	...
	Bulsár	...	...	P. 200 R. 9	166 1	366 10	376	366	160	200	360	10	9	98·36	90·00
	Kálliawari	...	...	84	59	143	143	145	94	46	141	...	...	98·61	...
	Total ...	...	...	P. 485 R. 9	412 1	897 10	227	899	508	369	887	10	9	98·89	90·00
Broach Collectorate.	Iláv	...	...	47	32	79	79	79	70	4	74	...	...	93·67	...
Kaira Collectorate.	Kapadvanj	...	...	205	198	403	403	403	323	59	383	...	...	95·04	...
	Borsad	...	...	13	13	26	26	26	12	8	26	...	...	100·	...
	Mohmadabad ...	...	...	152	118	270	270	270	231	13	245	...	...	90·74	...
	Kaira Jail	...	...	83	1	84	84	84	...	1	77	...	...	91·67	...
	Total ...	...	...	453	330	783	196	783	566	81	731	...	...	93·36	...
Ahmedabad Collectorate.	Dholera	...	...	47	41	88	88	88	39	45	84	..	...	95·45	...
	Khárághoda	...	...	29	27	56	56	64	36	11	47	..	...	83·93	...
	Total ...	...	...	76	68	144	72	152	75	56	131	...	...	90·97	...
Rewa Kantha States.	Lúnáváda	...	...	P. 104 R. 1	91 2	195 3	198	197	56	105	162	3	3	83·08	100·
Mahi Kantha States.	Sádra...	...	...	P. 126 R. 27	67 ...	193 27	220	193	152	36	188	27	9	97·41	33·33
	Native States Total...	...	...	P. 230 R. 28	158 2	388 30	209	390	208	141	350	30	12	90·21	40·00
	TOTAL FOR THE EASTERN GUJARÁT REGISTRATION DISTRICT	...	...	P. 1,291 R. 37	1,000 3	2,291 40	179	2,303	1,427	651	2,173	40	21	94·85	52·50

Statement No. III, showing Dispensary Vaccination, &c.—*continued.*

Districts.		Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the Season.	Total Number of Persons vaccinated.				Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination.				Re-vaccination.		Percentages of successful Cases.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.
										Under 1 year.	1 and under 6.	Total of all Ages.				
1		2	3	4				5	6	7	8	9	10	11	12	13
	THE WESTERN GUJARÁT CIRCLE.			Males.	Females.	Total.										
Káthiáwár.	Wadhwán	...	...	P. 68 R. 1	71 ...	139 1		140	139	83	31	114	1	1	82·01	100·
	Rájkot	...	...	R. 11	...	11		11	...	..	...	...	11	...	...	...
	Mánekváda	...	...	6	2	8		8	8	7	1	8	...	...	100·	...
	Songad	...	...	P. 1 R. 1	3 2	4 3		7	4	3	1	4	3	3	100·	100·
	Total ...	...	...	P. 75 R. 13	76 2	151 15		41	151	93	33	126	15	4	83·44	26·67
Native States.	Jhinjúváda	...	...	14	8	22		22	22	12	4	16	...	...	72·73	...
	Gondal	...	...	55	61	116		116	116	99	14	114	...	...	98·28	...
	Upleta	...	...	P. 172 R. 5	131 3	303 8		311	307	227	45	272	8	8	89·77	100·
	Dhoráji	...	...	P. 408 R. 3	349 ...	757 3		760	757	595	143	739	3	3	97·62	100·
	Bháyávadar	...	...	P. 107 R. 50	130 43	237 93		330	237	209	24	233	93	70	98·31	75·27
	Sárssi	...	...	37	35	72		72	72	51	21	72	...	...	100·	...
	Jetpur	...	...	62	61	123		123	123	107	14	121	...	...	98·37	...
	Babra	...	...	6	9	15		15	15	9	3	12	...	...	80·00	...
	Láthápádar	...	...	21	15	36		36	36	34	2	36	...	...	100·	...
	Bagusra	...	...	38	27	65		65	74	48	15	63	...	...	96·92	...
	Total ...	...	...	P. 920 R. 58	826 46	1,746 104		185	1,759	1,391	285	1,678	104	81	96·11	77·88
	TOTAL FOR THE WESTERN GUJARÁT CIRCLE	...	...	P. 995 R. 71	902 48	1,897 119		144	1,910	1,484	318	1,804	119	85	95·10	71·43
	THE SIND REGISTRATION DISTRICT.															
Karáchi Collectorate.	Keti Bandar... ...	...	...	P. 20 R. 3	19 ...	39 3		42	39	37	...	37	3	2	94·87	66 67
	Mirpur Batoro ...	...	...	33	36	69		69	69	56	13	69	...	...	100·	...
	Tatta	...	...	P. 92 R. 4	57 ...	149 4		153	149	81	25	106	4	2	71·14	50·00
	Jerruck	...	...	P. 17 R. 25	8 2	25 27		52	25	19	...	19	27	8	76·00	29·63
	Sehwán	...	...	49	27	76		76	76	52	23	75	...	...	98·68	...
	Total ...	...	...	P. 211 R. 32	147 2	358 34		78	358	245	61	306	34	12	85·47	35·29
Hyderabad Collectorate.	Tháru Sháh	...	...	55	25	80		80	80	43	25	68	...	...	85·00	...
	Hála	...	...	2	...	2		2	2	...	...	...	...	...	...	...
	Alahyarjo-Tando ...	..	...	14	8	22		22	22	15	4	19	...	...	86·36	...
	Tando	...	...	P. 36 R. 1	41 ...	77 1		78	77	49	10	59	1	...	76·62	...
	Tando Bago ...	...	...	45	13	58		58	58	16	40	57	..	...	98·28	...
	Tando Ádam ...	.	...	.....	2	2		2	2	...	1	1	...	...	50·00	...
	Total ...	...	...	P. 152 R. 1	89 ...	241 1		40	241	123	80	204	1	...	84·65	...
Thar and Parkar.	Nagar Párkar ...	...	...	P. 15 R. 2	13 ...	28 2		30	28	23	2	25	2	1	89·29	50·00
	Khipra	...	...	P. 20 R. ...	11 2	31 2		33	31	16	15	31	2	2	100·	100·
	Total ...	...	...	P. 35 R. 2	24 2	59 4		31	59	39	17	56	4	3	94·92	75·00

Statement No. III., showing Dispensary Vaccination, &c.—*continued.*

Districts.		Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the Season.	Total Number of Persons vaccinated.				Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination.				Re-vaccination.		Percentages of successful cases.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.
										Under 1 year.	1 and under 6.	Total of all Ages.				
1		2	3	4				5	6	7	8	9	10	11	12	13
	THE SIND REGISTRATION DISTRICT—*continued.*			Males.	Females	Total.										
Shikárpur Collectorate.	Rohri	...	...	P. 119 R. 124	103 4	222 128		350	222	188	29	217	128	103	97·75	80·47
	Mehar	...	...	15	21	36		36	36	33	1	34	...	...	94·44	...
	Kambar	...	...	P. 70 R. 70	58 ...	128 70		198	129	110	12	122	70	2	95·31	2·86
	Total ...	...	...	P. 204 R. 194	182 4	386 198		195	387	331	42	373	198	105	96·63	53·03
	TOTAL FOR THE SIND REGISTRATION DISTRICT	...	...	P. 602 R. 229	442 8	1,044 237		80	1,045	738	200	939	237	120	89·94	50·63
	THE BARODA CIRCLE.															
Native States.	Sankheda	...	...	40	55	95		95	95	66	23	94	...	...	98·95	...
	Sávli	...	...	P. 76 R. 2	42 ...	118 2		120	118	86	21	107	2	2	90·68	100·
	Sojitro	...	...	97	72	169		169	169	83	41	125	...	...	73·96	...
	Dabhoi	...	...	25	14	39		39	39	34	3	39	...	...	100·	...
	Padra	...	...	38	38	76		76	76	72	4	76	...	...	100·	...
	Pátan	...	...	93	77	170		170	170	153	17	170	...	...	100·	...
	Visnagar	...	...	2	...	2		2	2	...	...	...	...	...	...	...
	Vadnagar	...	...	116	104	220		220	220	209	11	220	...	...	100·	...
	Vijápur	...	...	30	18	48		48	48	41	7	48	...	...	100·	...
	Gandevi	...	...	46	41	87		87	87	76	9	85	...	...	97·70	...
	Bet	...	...	57	43	100		100	100	29	68	100	...	...	100·	...
	Amreli	...	...	190	178	368		368	368	282	76	358	...	...	97·28	...
	Dámnagar	...	...	55	44	99		99	99	45	54	99	...	...	100·	...
	Dhari { Dispensary...	...	...	10	11	21		21	21	19	2	21	...	...	100·	...
	Dhari { Battalion Hospital...	...	...	5	5	10		10	10	9	1	10	...	...	100·	...
	Vyara	...	...	33	31	64		64	65	40	23	63	...	...	98·44	...
	Mohwa	...	...	42	29	71		71	71	24	43	69	...	...	97·18	...
	Kadi	...	...	76	72	148		148	148	132	6	138	...	...	93·24	...
	Dwárka	...	...	13	12	25		25	25	19	4	23	...	...	92·00	...
	Kálol...	...	...	50	48	98		98	98	94	4	98	...	...	100·	...
	TOTAL FOR THE BARODA CIRCLE...	...	...	P. 1,094 R. 2	934 ...	2,028 2		101	2,029	1,513	417	1,943	2	2	95·81	100·
ADEN—SHAIK OTHMAN...		...	..	103	80	183		183	183	41	96	139	...	...	75·96	...
BUSHIRE		.	...	106	81	187		187	187	51	81	149	...	...	79·68	...
MUSCAT		...	...	14	9	23		23	24	3	7	22	...	...	95·65	...
TOTAL FOR THE	BRITISH TERRITORY	...	...	P. 7,121 R. 450	6,233 65	13,354 515		143	13,376	8,674	3,518	12,420	515	280	93·01	54·37
	NATIVE STATES...	...	...	P. 3,680 R. 188	3,264 58	6,944 246		150	6,975	4,984	1,486	6,506	246	144	93·69	58·54
GRAND TOTAL FOR THE BOMBAY PRESIDENCY.		...	...	P. 10,801 R. 638	9,497 123	20,298 761		145	20,351	13,658	5,004	18,926	761	424	93·24	55·72

Comparative Statement No. IV., showing the Number of Persons Primarily Vaccinated and the Number of those Persons who were Successfully Vaccinated in each of the undermentioned official years.

Establishment.	Persons primarily vaccinated.																			
	Years ending 31st March.																			
	1877.		1878.		1879.		1880.		1881.		1882.		1883.		1884.		1885.		1886.	
	Total Number.	Number successfully vaccinated	Total Number.	Number successfully vaccinated	Total Number.	Number successfully vaccinated	Total Number.	Number successfully vaccinated	Total Number.	Number successfully vaccinated	Total Number.	Number successfully vaccinated	Total Number.	Number successfully vaccinated	Total Number.	Number successfully vaccinated	Total Number.	Number successfully vaccinated	Total Number.	Number successfully vaccinated
Government	5,518	5,346	5,472	5,311	4,630	4,444	3,374	3,220	4,130	3,980	5,563	5,497	5,266	5,225	6,400	6,165	4,397	4,249	4,947	4,545
Municipal	61,671	58,300	50,250	46,355	42,211	39,129	48,318	45,069	49,857	47,361	54,726	52,225	65,208	61,802	59,559	56,670	56,895	54,582	58,083	55,631
Local Fund	394,775	382,211	340,998	326,670	304,420	292,640	322,871	312,124	347,194	337,392	379,008	369,913	419,822	407,635	441,180	426,408	441,340	425,148	471,789	454,756
Cantonment	827	771	845	804	872	846	839	939	967	967	1,060	1,060	1,471	1,450	1,465	1,449	1,485	1,472	1,518	1,442
Native State	242,391	226,402	246,773	228,333	188,447	174,757	188,196	175,979	213,411	202,210	257,752	246,565	266,280	254,072	284,180	269,598	270,194	253,942	294,426	279,746
Dispensary	19,996	18,486	20,201	17,904	17,887	16,233	19,119	17,406	22,732	21,009	26,813	25,050	28,770	26,733	29,986	27,439	24,014	21,626	20,298	18,926
Army ... European	1,973	1,973	1,313	1,313	494	453	635	604	659	610	571	434	402	390	497	466	328	305	206	188
Army ... Native	5,063	4,659	4,203	3,920	3,008	2,719	3,049	2,499	3,555	2,984	3,830	3,179	4,987	4,438	3,698	3,128	3,554	3,121	3,120	2,901
Total ...	732,184	698,148	670,055	630,590	561,969	531,221	586,501	557,840	642,505	616,513	729,323	703,923	792,206	761,745	826,965	791,323	802,207	764,445	854,357	818,135

Note.—Re-vaccinations are wholly excluded from this Statement.

Annual Reports: Annual Report of the Sanitary Commissioner for the year 1885.

No. 2939.

GENERAL DEPARTMENT.

Bombay Castle, 18th August 1886.

Letter from the Sanitary Commissioner, No. 1669-B., dated 29th June 1886—Forwarding a copy of his annual report for the year 1885.

RESOLUTION.—The Sanitary Commissioner has submitted a very complete report containing useful and detailed statistical information regarding the work of the year 1885.

2. The most important part of Mr. Hewlett's inspection work appears to have been performed during the months of January and February. In the latter month he visited Karáchi, Jacobabad and Quetta, on the last of which places he submitted a special sanitary report which is now under the consideration of the Government of India. In January he visited the Cities of Surat, Broach and Ahmedabad. He endeavoured to induce the Municipalities of the first two places to effect some sanitary reforms, but without success. In this report he points out most forcibly the necessity for improving the sanitary condition of Ahmedabad, a city in which the mean death-rate for the last eleven years has been 53·15 per thousand of population. The Governor in Council quite concurs in the Sanitary Commissioner's remarks and hopes that the Municipal Commissioners of this large and important city will not continue to be unconscious of the responsibility they incur by refusing to carry out some thoroughly effective sanitary scheme.

3. There is still much room for improvement in the registration of births and deaths, more particularly of the former, and the attention of Collectors should again be drawn to the importance of checking the registration work done by village officers. The Municipal Commissioner of Bombay will observe that the registration of births in that city continues to be reported as extremely defective. The number of births registered in the whole Presidency including Sind during the year under review was 572,431 and the number of deaths 473,591, the former being at the rate of 34·79 and the latter at the rate of 28·78 per thousand of population.

4. Of the deaths registered no less than 314,237 (or 19·1 per thousand) were due to fever. A striking decrease as compared with the previous year is noticeable in the deaths from small-pox which were only 2,646 or 0·16 per thousand and also a large increase in cholera deaths from 13,804 to 37,287 (2·27 per thousand). The cholera epidemic was most severely felt in Sind, but no district in the Presidency wholly escaped. The death-rate was lowest in Ratnágiri, while it was very low (·75 per thousand) in the City of Bombay. The violent deaths were 5,577 in number and the deaths from bowel complaints 45,056.

5. The statistics given regarding vaccination are satisfactory. In all 907,790 operations were performed. 77·05 per cent. of the infants under one year old supposed to be available for vaccination—*i.e.*, the number registered as born minus the number registered as having died—were actually vaccinated. The total expenditure on vaccination was Rs. 2,80,592-13-6 of which sum Municipal and Local Funds contributed nearly half.

6. Among the important events of the year was the introduction of a rule that the bills of health of ships leaving Bombay should be prepared in a specified form and should be signed by the Health Officer of the Port. Much useful information has been extracted by the Sanitary Commissioner from a "long and interesting" report written by the Health Officer, Dr. MacCartie, who has made some valuable suggestions about the pilgrim traffic and the improvement of the sanitary condition of the port. But this subject should be reported on separately.

7. The Sanitary Commissioner speaks in the highest terms of all the Deputy-Sanitary Commissioners who served under him during the year. One of them, Surgeon Parker, is mentioned as having submitted sanitary reports on no less than 176 villages. The thanks of Government are due to these officers and also to the Sanitary Commissioner, and to Surgeon Major MacRury, who acted for him during his absence on privilege leave.

J. DE C. ATKINS,
Acting Under Secretary to Government.

To

The Sanitary Commissioner,
The Surgeon General with the Government of Bombay,
The Military Department of the Secretariat,
The Judicial Department of the Secretariat,
The Political Department of the Secretariat,
The Public Works Department of the Secretariat,
The Commissioner, N. D.,
The Commissioner, C. D.,
The Commissioner, S. D.,
The Commissioner in Sind,
All Collectors, including the Collectors and Deputy Commissioners in Sind,
The Municipal Commissioner for the City of Bombay,
The Compiler of the General Administration Report for 1885-86,
The Accountant General.
} With copies of the report.

The Director of Agriculture,

The Secretary of State for India,
The Government of India.
} By letter.

TWENTY-THIRD ANNUAL REPORT

OF THE

Sanitary Commissioner for the Government of Bombay,

1886,

WITH

APPENDICES.

Bombay:
PRINTED AT THE GOVERNMENT CENTRAL PRESS.
1887.

CONTENTS.

SECTION I.—METEOROLOGY—Nil.

SECTION II.—EUROPEAN ARMY—Nil.

SECTION III.—NATIVE ARMY—Nil.

SECTION IV.—JAILS—Nil.

SECTION V.

GENERAL POPULATION AND VITAL STATISTICS.

BIRTHS.

PARA.		PAGE.
1.	Number of registered births	1
2.	Birth-rate in 1886 compared with previous years from 1876 to 1885 ...	2
3.	Births by months	*id.*
4—6.	Comparison between the number of births registered in each District and Collectorate for 1886 with the number for 1885 and the mean for 10 years	2—4
7—9.	Births registered in Urban and Rural Districts...	4, 5
10—12.	Birth-rates in Tálukás...	5—10
13—16.	Birth-rate in sequence in Towns	11—12
17.	Birth-rates in Cantonments	13
18—19.	Still-born	*id.*

DEATHS.

20.	Number of deaths	14
21.	Death-rate	*id.*
22.	Male and female death-rates	*id.*
23.	Deaths by Districts	*id.*
24.	Do. Collectorates	15
25.	Do. do. in sequence	15—16
26.	Do. Sexes	16
27.	Birth and death-rates compared by Collectorates	*id.*
28.	Deaths by ages...	17
29.	Do. by caste or class	*id.*
30.	Do. by causes	18
31.	Do. by months	*id.*
32.	Number of Circles	*id.*
33—35.	Death-rates in Rural Circles	19—25
36.	Birth and death-rates in sequence in Towns	25—26
37.	Deaths in Towns	27
38.	The high death-rate in Viramgám and other towns due to insanitary conditions which prevail	*id.*
39.	Death-rate in Jambusar	*id.*
40.	Do. Ahmedabad	27—28
41.	Death-rates in Ahmedabad for 1886 compared with 1885 and previous years	28
42.	Death-rate in Ahmednagar...	*id.*

PARA. PAGE.

43. Comparison of Presidency death-rates at different ages with England ...28—29
44. Death-rates by ages in the 4 towns compared with London 29
45. Births and deaths by causes and their ratios per 1,000 of population in each Táluka and Town in each Collectorate ... ...29—30

WESTERN REGISTRATION DISTRICT.

COLLECTORATES.

46. Khándesh 30
47. Násik 31
48. Thána ... ...31—32
49. City of Bombay 32
50. Kolába ... ...32—33

CENTRAL REGISTRATION DISTRICT.

COLLECTORATES.

51. Ahmednagar 33
52. Poona ... ...33—34
53. Sholápur. 34
54. Sátára ... ...34—35
55. Ratnágiri 35

SOUTHERN REGISTRATION DISTRICT.

COLLECTORATES.

56. Belgaum 36
57. Dhárwár ... ... *id.*
58. Bijápur 37
59. Kánara ... ... *id.*

EASTERN GUJARA'T REGISTRATION DISTRICT.

COLLECTORATES.

60. Surat 38
61. Broach ... ... *id.*
62. Kaira 39
63. Panch Maháls ... ... *id.*
64. Ahmedabad 40

SIND REGISTRATION DISTRICT.

COLLECTORATES.

65. Karáchi ... ... *id.*
66. Hyderabad 41
67. Thar and Párkar ... ... *id.*
68. Shikárpur 42
69. Upper Sind Frontier ... ...42—43

70. Death-rates in Cantonments in British Territory 43
71. Statistics for Cantonment Bázárs in *quasi* foreign territory ... ...43—44

SECTION VI.

HISTORY OF CHIEF DISEASES.

CHOLERA.

72. Mortality in 1886 45
73. Monthly mortality ... ... *id.*
74. Deaths arranged by Collectorates in sequence 46
75. Total mortality for 21 years ... ... *id.*
76. Statement appended to Cholera Map ... ... *id.*
77. Cholera Map 47

SMALL-POX.

78. Small-pox mortality by Sexes ... ... *id.*
79. Small-pox deaths since 1875 ... ... *id.*

PARA. PAGE.

80. Deaths by Districts and Collectorates 48
81. Deaths by ages ... ... *id.*
82. Monthly Distribution 49
83. Small-pox Diagram ... ... *id.*

FEVER.

84. Fever mortality by Sexes 49
85. Deaths since 1875 ... ... *id.*
86. Deaths by Districts and Collectorates 50
87. Comparison of death-rates in Towns and Cantonments with those of the Zillas in which thay are situated ... ... *id.*
88. Deaths by months 51
89. Fever Diagram ... ...51—52
90. Fever mortality classified by Tálukás 53

BOWEL-COMPLAINTS.

91. Deaths from Bowel-complaints by Sexes ... ... *id.*
92. Deaths since 1875 ... ... *id.*
93. Deaths by Districts and Collectorates ... ... *id.*
94. Comparison of death-rates in Towns and Cantonments with those of the Zillas in which they are situated 54
95. Bowel-complaints Diagram... ... ...54—55
96. Deaths by months ... ... 56.

INJURIES.

97. Deaths from Injuries ... ... *id.*
98. „ since 1875 ... ... *id.*
99. „ from Injuries in 1885 and 1886 arranged by Sexes ... ... *id.*
100. Deaths by Districts and Collectorates 57
101. Death-rate in Towns and Cantonments as compared with the Collectorates... *id.*
102. Snake-bites by months ... ... *id.*
103. „ by Collectorates 58
104. Details of Injuries and suggestion for prevention of deaths from drowning in wells ... ...58—60

OTHER CAUSES.

105. Deaths from other causes by Sexes 61
106. „ since 1875 ... ... *id.*

SECTION VII.

GENERAL HISTORY OF VACCINATION.

107. Preliminary 62
108. Strength of the Department ... ... *id.*
109. Work amongst the Civil and Military Population 63
110. Primary Vaccinations ... ... *id.*
111. Infants successfully vaccinated in the 24 Collectorates ... ... *id.*
112. Results in Primary Vaccinations 64
113. Re-vaccinations ... ... *id.*
114. Total operations ... ... *id.*
115. Primary Vaccinations by Districts ... ... *id.*
116. Re-vaccinations by Districts 65
117. Total Operations by Districts ... ... *id.*
118. Percentages of success by Districts ... ... *id.*
119. Ratio to the total population protected... ... ... *id.*
120. Agency ... ... *id.*
121. Sex ... ... *id.*
122. Race 66
123. Age ... ... *id.*
124. Lymph, English lymph and animal vaccination ... ... *id.*
125. Expenditure ... ... *id.*
126. Work of Supervising Officers ... ... *id.*
127. Inoculation. Ill-effects by vaccination ... ... *id.*
128. Compulsory Vaccination Acts ... ... *id.*
129. Aid from Civil, Revenue and Political Officers ... ... *id.*

PARA. PAGE.

SECTION VIII.

SANITARY WORKS—MILITARY.

130—132. Amount expended on Sanitary Works (Military) at each Station ... 67

SECTION IX.

SANITARY WORKS—CIVIL.

133—134. Annual income of the Municipalities and the amount expended on conservancy 69
135. Annual income and expenditure in each Division ... ... *id.*
136—144. Water-supply, Drainage, &c., of the several Municipal Towns ...69—73

LOCAL FUND CIRCLES.

145—148. Amount expended on Water Works 74

SECTION X.

PERSONAL PROCEEDINGS AND GENERAL REMARKS.

149. Personal Proceedings 75
150. Government Resolution affecting the Sanitation of the Port ... ... *id.*
151. Pilots on boarding incoming vessels to receive a certificate stating whether the ships are free from infectious disease or not ... ... *id.*
152. Pao Pir selected as Quarantine station ... ...75—76
153. Infectious disease 76
154. Sanitary condition of vessels ... ... *id.*
155. Ships' bilges ... ... *id.*
156. Infectious disease on board vessels leaving Port with clean bill of health ... *id.*
157. Passengers in Native Craft... 77
158. Bills of health provided to troop-ships ... ... *id.*
159. Do. to coasting vessels, &c. ... ... *id.*
160. Pratique ... ... *id.*
161. Vessels entering Port with R flag ... ... *id.*
162. Only one ship detained at Quarantine anchorage 78
163—164. Dr. MacCartie's remarks on pilgram traffic ... ... *id.*
165. Reasons for heavy fines being inflicted ... ... *id.*
166. Cholera in 1886 ... ... *id.*
167. Sanitary condition of the harbour and foreshore ... ...78—79
168. No drains should discharge into basins 79
169. Ghorpuri Barracks ... ... *id.*
170. Unhealthiness of new barracks at Ghorpuri ... ... *id.*
171. Selection of No. 5 new barrack ... ... *id.*
172. Description of No. 5 barrack room before it was altered ... ...79—80
173. Under draining of site proposed in 1877, but negatived by Government ... 80
174. Principles on which recommendations for alterations were made ... *id.*
175. Some of the original proposals could not be carried out on account of the expense ... ... *id.*
176. The alterations made ... ... *id.*
177. Substitution of wooden jhamps for the venetians 81
178. Porches ... ... *id.*
179. Diagram 3 ... ... *id.*
180. Alterations made in barrack room ... ... *id.*
181. Army Sanitary Commission's instructions regarding ventilation ...81—82
182. The manner in which the instructions were carried out 82
183. Danger of chills brought to notice by the Army Sanitary Commission ... *id.*
184. The alterations summarized... ... ...82—83
185. Recommendation that this system should be tried at Mhow and Karáchi ... 83
186. Persistent unhealthiness of Napier Barracks at Karáchi ... ... *id.*
187. Description of Napier Barracks ... ... *id.*
188. Disease in the barrack may in a great measure be avoided ... ... *id.*
189. Government resolve to wait... ... ... *id.*
190. Remarks on ventilation in houses and rooms ... ... *id.*
191. Ventilation should be independent of doors and windows 84
192. Windows and doors in Dutch Factory at Surat ... ... *id.*
193. Necessity for general introduction of better means of ventilation throughout India ... ... *id.*
194. Standard plans for barracks ... ... *id.*
195. Committee to report on village sanitation ... ... *id.*

PARA. PAGE.

196. Proposal to restrict provisions of Act to villages containing not less than 500 inhabitants 84
197. Such a proposal would render Act nugatory 85
198. Suggestion regarding working of Act ... ... *id.*
199. Such an Act must be at first tentative ... ... *id.*
200. Miss Nightingale's pamphlet ... ... *id.*
201. Opposition to Colonel Ducat's proposal regarding water-supply and sewerage at Ahmedabad ... ... *id.*
202. Sir Theodore Hope's memorandum dated 25th October 1886 ... ... *id.*
203. Colonel Ducat's answer to the criticisms on the water-supply scheme by "one of the ablest and most experienced Irrigation Engineers in India"... *id.*
204. Government considers Colonel Ducat's water-supply scheme sound and judicious, and expresses its approval of its adoption in a modified form by the municipality... 86
205—206. His views will be very shortly put to the test ... ...86—87
207. Sir Theodore Hope's recommendation to his Ahmedabad friends ... 87
208. Misapplication of the term "underground drainage". ... ... *id.*
209. The impracticability of the third recommendation of Sir Theodore Hope ... *id.*
210. The pail system has only been applied at privies, and not for removal of liquid sullage ... ... *id.*
211. Proposal for hand removal of sullage from the residences of 19,621 families residing within City walls ... ... *id.*
212. The results of giving effect to such a proposal 88
213. Recommendation to send Home Sir Theodore Hope's memorandum dated 25th October 1886 and memorandum of 2nd April 1887 ... ... *id.*
214. Some good results of the memoranda by Sir T. Hope ... ... *id.*
215. Sanitary estimate of towns and villages ... ... *id.*
216. Water-supply—rivers 89
217. Do. tanks ... ... *id.*
218. Do. wells ... ... *id.*
219. Legislation required before effective measures can be taken for preserving the sources of water ... ... *id.*
220. Drainage ... ... *id.*
221. Domestic cleansing ... ... *id.*
222. Aid afforded by officers of the Department ... ... *id.*

APPENDIX I.

Sanitary Estimate of Villages and Towns inspected by Deputy Sanitary Commissioners and Civil Surgeons ... ... 1—6

APPENDIX II.

GENERAL POPULATION AND VITAL STATISTICS.

Births registered in the Districts during 1886 2
Deaths do. do. *id.*
Deaths registered in the Districts during each month of the year 3
Do. in do. according to age ... ... *id.*
Do. in do. according to classes 4
Deaths from different causes in the Districts and Towns during 1885 ... ... 4—6
Do. from cholera in the Districts during each month of the year 6
Do. from small-pox do. do. 7
Do. from fever do. do. ... ... *id.*
Do. from bowel-complaints in do. do. 8

VACCINATION.

Particulars of Vaccination during 1886-87 ... ... 9—19
Cost of the Department during the year ... ...20—21
Dispensary Vaccination during the year ... ...22—27
Comparative Statement showing the number of persons primarily vaccinated and the number of persons successfully vaccinated in each year from 1877-78 to 1886-87 28

ANNUAL SANITARY REPORT FOR 1886.

SECTION I.—METEOROLOGY. No remarks.

SECTION II.—EUROPEAN ARMY. No remarks.

SECTION III.—NATIVE ARMY. No remarks.

SECTION IV.—JAILS. No remarks.

These sections are omitted from this report: (*vide* Government of India Resolution No. 118, dated 27th June 1878).

SECTION V.

GENERAL POPULATION AND VITAL STATISTICS.

BIRTHS.

Number of registered births.

In the Presidency of Bombay, including Sind, during the year 1886 the births of 303,376 males and 278,177 females, or a total of 581,553 children, were recorded against 298,406 boys and 274,025 girls, or a total of 572,431 children, in 1885. They are thus 9,122 in excess of the number recorded in the previous year, whilst they exceed the mean of the preceding 10 years ending 1885 by 169,643.

Birth-rate in 1886 compared with previous years from 1876 to 1885.

2. The following table shows the number of births registered in each year from 1876 to 1886, their ratios per 1,000 of population, and the proportion of males to females :—

Years.	Population.	Number of Births registered.			Ratio per 1,000 of Population.			In every 100 Births there were		For every 100 Male Births the Females were
		Males.	Females.	Children.	Males.	Females.	Children.	Males.	Females.	
1876	16,228,774	181,872	163,612	345,484	11·21	10·08	21·29	52·64	47·36	89·96
1877	16,181,741	164,262	147,399	311,661	10·15	9·11	19·26	52·75	47·25	89·73
1878	16,181,741	128,848	114,405	243,253	7·96	7·07	15·03	52·97	47·03	88·80
1879	16,228,774	151,460	136,410	287,870	9·33	8·41	17·74	52·61	47·39	90·06
1880	16,228,774	195,285	175,588	370,873	12·03	10·82	22·85	52·66	47·34	89·91
1881	16,454,414	239,912	219,745	459,657	14·58	13·35	27·93	52·19	47·81	91·59
1882	16,454,414	255,927	235,419	491,346	15·55	14·31	29·86	52·09	47·91	91·98
1883	16,454,414	261,066	239,835	501,901	15·92	14·58	30·50	52·20	47·80	91·85
1884	16,454,414	278,986	255,737	534,723	16·96	15·54	32·50	52·17	47·83	91·67
1885	16,454,414	298,406	274,025	572,431	18·14	16·65	34·79	52·13	47·87	91·83
Mean for 10 years ..	16,332,187	215,692	196,218	411,910	13·21	12·01	25·22	52·36	47·64	90·97
1886	16,454,414	303,376	278,177	581,553	18·44	16·90	35·34	52·17	47·83	91·69

It is satisfactory to notice the progressive improvement which, except in the three years of famine, has taken place thoughout the Presidency in the registration of births. The increase in the last 2 years is to be largely ascribed to the progress that has been effected by the new system of compiling the vital statistics in the offices of the Deputy Sanitary Commissioners, where the registers of births as well as those of deaths undergo very complete and searching scrutiny.

Births by Months.

3. The following table shows the monthly distribution of births in 1886 as compared with 1885 and with the monthly mean of the previous 10 years :—

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Mean for 10 years 1876—1885	31,034	28,612	32,511	32,475	34,230	35,697	37,388	36,763	36,228	36,839	35,725	34,410	411,910
1885..	44,270	42,380	50,125	49,224	51,124	51,147	49,324	46,700	46,101	48,224	47,516	46,296	572,431
1886..	44,546	38,747	41,429	44,058	46,197	50,296	51,976	52,955	53,810	54,420	52,389	50,730	581,553

The greatest number of births (54,420) was registered in October and the least (38,747) in February. The largest number of births usually occurs in the month of July, so that this year it is somewhat abnormal.

Comparison between the number of births registered in each District and Collectorate for 1886 with the number for 1885 and the mean for 10 years.

4. The next table shows the number of births registered in 1886 in each District and Collectorate of the Presidency contrasted with those for 1885 and the mean for 10 years :—

Districts.	Number.	Collectorates.	Population according to Census of 1881.	Mean for 10 years, 1876—1885. Number of Births.	Mean for 10 years, 1876—1885. Ratio per 1,000 of Population.	1885. Number of Births.	1885. Ratio per 1,000 of Population.	1886. Number of Births.	1886. Ratio per 1,000 of Population.
Western Registration District.	1	Khándesh	1,237,231	33,933	30·00	48,595	39·28	44,811	36·22
	2	Násik	731,206	22,678	30·30	29,947	32·33	28,147	38·03
	3	Thána	807,367	20,150	25·78	22,559	27·94	22,657	33·03
	4	City of Bombay	773,196	14,789	20·86	14,685	18·99	14,679	18·98
	5	Kolába	482,830	10,692	22·14	13,483	27·92	14,561	30·14
Central Registration District.	6	Ahmednagar	751,228	23,767	31·17	32,444	43·19	32,188	42·85
	7	Poona	900,021	21,554	23·84	32,914	36·54	31,165	34·60
	8	Sholápur	582,487	15,483	23·81	25,838	44·36	25,999	44·63
	9	Sátára	1,062,350	34,[illegible]25	32·33	48,467	45·62	44,988	42·35
	10	Ratnágiri	997,090	17,363	17·22	24,175	24·25	25,077	25·15
Southern Registration District.	11	Belgaum	864,014	27,676	30·70	37,949	43·92	35,821	41·40
	12	Dhárwár	882,907	29,416	31·44	42,201	47·80	40,261	45·60
	13	Bijápur	638,493	16,858	23·18	28,571	44·75	27,182	42·57
	14	Kánara	421,840	11,859	28·91	12,596	29·86	12,989	30·79
Eastern Gujarát Registration District.	15	Surat	614,198	18,215	29·83	23,031	37·49	24,795	40·37
	16	Broach	326,930	8,347	24·65	12,469	38·11	13,175	40·30
	17	Kaira	804,800	24,270	30·68	31,287	38·87	30,643	38·08
	18	Panch Mahále	258,479	6,573	26·49	9,997	39·13	8,757	34·28
	19	Ahmedabad	856,324	22,137	26·26	32,474	37·92	33,287	38·87
Sind Registration District.	20	Karáchi	478,688	7,141	15·33	10,368	21·65	12,659	26·45
	21	Hyderabad	754,634	8,387	11·36	13,853	18·38	19,006	25·46
	22	Thar and Párkar	203,344	4,294	22·05	6,671	32·81	7,783	38·27
	23	Shikárpur	852,986	10,789	13·24	16,232	19·03	26,671	31·27
	24	Upper Sind Frontier	124,181	1,215	11·35	1,635	13·17	3,302	26·59

ABSTRACT.

Western Registration District	4,031,830	102,301	26·68	129,369	31·67	124,845	30·59
Central do. do.	4,293,776	112,492	26·64	163,838	38·15	159,417	37·13
Southern do. do.	2,807,254	85,809	28·85	121,317	43·22	116,253	41·41
Eastern Gujarát Registration District	2,857,731	79,542	23·07	109,248	38·23	110,657	38·72
Sind Registration District	2,413,823	31,766	13·79	48,759	20·20	70,381	29·16
Presidency ..	16,454,414	411,910	25·22	572,431	34·79	581,553	35·34

It will be seen, from the abstract of the above table, that the number of births recorded in the districts of Eastern Gujarát and Sind in 1886 is higher than in the previous year, but in the remaining districts it is lower. The increase in Sind is most remarkable, as the recorded births were 21,622 in excess of those in the previous year, whilst they exceed the mean of the preceding 10 years ending 1885 by 38,615. They are, however, notwithstanding this large increase, still very far from being even approximately correct; but we have, I think, fair grounds for hoping, now that a beginning has been made, that the registration will year by year improve.

5. The total increase for the Presidency was 10·12 per 1,000 of population above the mean of the preceding 10 years, and the number of recorded births in 1886 is higher than in 1885 in the following 13 Collectorates, *viz.* :—

Thána.	Surat.	Hyderabad.
Kolába.	Broach.	Thar and Párkar.
Sholápur.	Ahmedabad.	Shikárpur.
Ratnágiri.	Karáchi.	Upper Sind Frontier.
Kánara.		

6. The Collectorates in which there was a falling off, as compared with 1885, are as follows :—

Collectorates.	1885.	1886.	Collectorates.	1885.	1886.
Khándesh ...	48,595	44,811	Belgaum	37,949	35,821
Násik	29,947	28,147	Dhárwár	42,201	40,261
City of Bombay ...	14,685	14,679	Bijápur	28,571	27,182
Ahmednagar ...	32,444	32,188	Káira	31,287	30,643
Poona	32,914	31,165	Panch Mahále ...	9,997	8,757
Sátára	48,467	44,988			

The extremely defective state of the registration of births in the City of Bombay has been repeatedly commented upon, and I regret to be obliged again to bring it prominently to notice. From a subsequent table it will be seen that, out of 56 towns in the Presidency, the City of Bombay occupies the 8th place from the bottom of the list. It is, I submit, not creditable to the leading Municipality in the Presidency that so much indifference continues, year after year, to be shown to the subject. Government was pleased, last year, to direct the attention of the Municipal Commissioner to this matter; but no improvement has taken place, and, unless it is taken up in a really earnest manner, there appears to be no hope that the registration of births in this City will improve.

Birth registration in urban and rural districts.

7. The birth-rate per 1,000 of population among the urban and rural population in each Collectorate of the Presidency during 1886 as compared with 1885 is given in the following table. During the year under report the births recorded in the town of Bijápur have been included in the urban population of the Collectorate, formerly known as the Kaládgi Collectorate, but now designated, after its principal town, Bijápur :—

Collectorates.	Urban and Rural.	Population.	1885.	1886.
Khándesh	Urban... ...	49,465	21·95	22·80
	Rural	1,187,766	40·00	36·78
Násik	Urban... ...	48,535	22·03	21·94
	Rural	732,671	39·41	36·96
Thána	Urban... ...	27,366	13·30	9·54
	Rural	780,001	28·45	28·71
City of Bombay	Urban... ...	773,196	18·99	18·98
	Rural	.....	...	...
Kolába	Urban... ...	23,531	20·57	22·40
	Rural	459,299	28·31	30·53
Ahmednagar	Urban... ...	46,288	31·52	35·43
	Rural	704,940	43·95	43·33
Poona	Urban	147,376	27·96	27·42
	Rural	753,245	38·23	36·01
Sholápur	Urban... ...	92,926	25·15	26·15
	Rural	489,561	48·00	48·14
Sátára	Urban... ...	51,482	32·11	25·97
	Rural	1,010,868	46·31	43·18
Ratnágiri	Urban... ...	21,563	27·13	30·79
	Rural	975,527	24·18	25·03
Belgaum	Urban... ...	54,190	30·15	28·60
	Rural	809,824	44·84	42·32
Dhárwár	Urban... ...	91,071	39·72	36·78
	Rural	791,836	48·73	46·61
Bijápur	Urban... ...	18,448	20·50	23·47
	Rural	620,045	45·17	43·14
Kánara	Urban... ...	24,390	33·99	33·74
	Rural	397,450	29·61	30·61
Surat	Urban... ...	123,073	32·81	32·92
	Rural	491,125	38·67	42·24
Broach	Urban... ...	48,760	34·66	32·69
	Rural	278,170	38·71	41·63

Collectorates.	Urban and Rural.	Population.	1885.	1886.
Kaira	Urban... ...	67,614	29·16	30·78
	Rural	737,186	39·78	38·74
Panch Maháls	Urban... ...	25,736	22·53	21·37
	Rural	229,743	40·99	35·72
Ahmedabad	Urban... ...	171,390	38·79	39·42
	Rural	684,934	37·70	38·74
Karáchi...	Urban... ...	68,332	44·72	48·89
	Rural	410,356	17·82	22·71
Hyderabad	Urban... ...	45,195	28·23	34·05
	Rural	709,429	17·73	25·97
Thar and Párkar	Urban... ...	2,828	22·63	24·04
	Rural	200,516	32·95	38·47
Shikárpur	Urban... ...	83,073	19·06	25·45
	Rural	769,913	19·03	31·90
Upper Sind Frontier ...	Urban... ...	11,352	12·33	19·03
	Rural	112,829	13·25	27·35
Presidency ...	Urban... ...	2,117,180	26·17	26·56
	Rural	14,337,234	39·90	36·64

8. The recorded birth-rates among the urban and rural populations of the Presidency were, respectively, 26·56 and 36·64 against 26·17 and 39·90 in 1885. Amongst the rural population of each Collectorate, except Ratnágiri, Kánara, Ahmedabad, Karáchi, and Hyderabad, the birth-rates were higher than in the urban circles.

9. The difference is most marked in the following Collectorates :—

	Birth-rate per 1,000.	
	Rural.	Urban.
Sholápur	48·14	26·15
Bijápur	43·14	23·47
Thána	28·71	9·54
Sátára	43·18	25·97
Násik	36·96	21·94
Thar and Párkar	38·47	24·04
Panch Maháls	35·72	21·37
Khándesh	36·78	22·80
Belgaum	42·32	28·60

Whilst in the undermentioned 5 Collectorates the birth-rates in the rural circles are lower than in the urban :—

	Urban.	Rural.
Karáchi	48·89	22·71
Hyderabad	34·05	25·97
Rutnágiri	30·79	25·03
Kánara	33·74	30·61
Ahmedabad	39·42	38·74

Birth-rates in Tálukás.

10. The birth-rate for each táluka (rural registration circle) is shown in subsequent statements under each Collectorate, but it seems desirable, as in the case of towns, to examine the results collectively. I have, therefore, prepared the following statement :—

REGISTRATION OF BIRTHS.

BIRTH-RATES AMONG THE 222 RURAL CIRCLES OF REGISTRATION.

Collectorates.	Above 50 per 1,000.		Between 40 and 50 per 1,000.		35 to 40 per 1,000.		30 to 35 per 1,000.		20 to 30 per 1,000.		Below 20 per 1,000.	
Western Registration District.												
Khándesh	Dhulia	51·07	Sindkheda	43·91	Jalgaon	39·52	Rhusával and its petha Edalabad.	33·48	Pimpalner and its petha Nizámpur.	27·97	Taloda	18·24
			Amalner and its petha Párola	43·89	Shirpur	38·48	Jámner	33·28				
			Cháliagaon	43·64	Nandurbár	37·68	Sháhádá	30·39				
			Erandol	40·46	Chopda	37·40						
					Páchora and its petha Bhadgaon.	36·23						
					Sávda and its pethas Yával and Ráver.	35·28						
Násik	.....	...	Nándgaon	45·89	Peint	39·51	Niphád	33·94	.....	...	.....	...
			Báglán	41·36	Dindori	39·27	Yeola	33·23				
			Sinnar	41·25	Kalvan	35·26	Násik	31·09				
			Málegaon	40·75	Chándor	35·15	Igatpuri	30·52				
Thána	.....	...	.....	...	.....	...	Váda	33·18	Sháhápur	29·44	.....	...
							Dáhánu	31·76	Bhiwndi	28·99		
							Kalyán	31·10	Máhím	26·09		
							Karjat	31·06	Sálsette	22·47		
							Murbád...	30·38	Bassein...	21·91		
Kolába	.....	..	.....	...	.....	...	Panvel	33·19	Mahád	27·70	.....	...
							Roha	32·74	Mángaon	27·17		
							Pen and its petha Nagotna...	32·45	.....	...		
							Alíbág	31·79	.....	...		
Central Registration District.												
Ahmednagar	Karjat	55·83	Shevgaon	44·24	Shrígonda	38·82	Akola	33·47	.....	...	.....	...
	Jamkhed	52·62	Nevása...	42·25	Párner...	38·28						
	Sangamner	52·33	Nagar...	42·25								
			Kopargaon	42·11								
			Ráhuri...	40·73								
Poona	.....	...	Indápur	49·61	Purandhar	39·88	Khed	33·92	Mával	26·58	.....	...
			Junnar	41·45	Haveli	35·98	Bhimthadi	32·98				
							Sirúr	32·93				

Sholápur	Karmála ... ... Mádha	54·22 53·10	Bársi ... ... Sángola... ... ... Pandharpur ... ... Sholápur ... ... Málsiras	49·20 46·67 46·13 44·32 43·63	.....	...	... ..	...	.....	...	.....	...
Sátára	Mán ... ... Khatáv	54·94 52·02	Khánápur ... ... Karád ... ... Sátára ... ... Koregaon ... ... Tásgaon ... ... Pátan ... ... Wái	47·36 44·36 44·22 43·48 42·36 42·25 41·18	Válva ... . Jávli	37·38 36·29	.....	...	Malcolm Peth	23·45	.....	...
Ratnágiri	.....	...	.....	...	.....	...	.....	...	Khed ... ... Ratnágiri ... ... Chiplún ... ... Devgad ... ... Rájápur ... ... Málvan ... ... Sangameshvar ... Dápoli	28·57 26·08 25·36 25·05 24·92 24·86 23·75 22·62	.....	...
Southern Registration District.												
Belgaum	.....	...	Gokák ... ... Parasgád ... ... Belgaum ... ... Sampgaon ... .. Athni ... ... Chikodi	49·56 45·59 43·73 43·10 41·05 40·49	Khánápur	35·29	.....	...	.....	...	.....	...
Dhárwár	Ron	55·96	Hubli ... ... Ránebennur ... ... Karajgi... ... ... Gadag and its petha Mundargi ... ... Navalgund and its petha Nargund ... Dhárwár and its petha petha Mugud ... Bankápur ... ... Kod ... ... Hángal	50·00 48·83 47·25 47·20 46·88 46·28 46·09 44·57 41·06	.....	...	.....	..	.....	...	.....	...

REGISTRATION OF BIRTHS.

BIRTH-RATES AMONG THE 222 RURAL CIRCLES OF REGISTRATION.

Collectorates.	Above 50 per 1,000.		Between 40 and 50 per 1,000.		35 to 40 per 1,000.		30 to 35 per 1,000.		20 to 30 per 1,000.		Below 20 per 1,000.	
Bijápur	Indi	50·07	Síndgi	48·07	Bijápur...	39·74	.....	...	.....	...	.....	...
			Hungund	43·23	Bádámi...	38·70						
			Bágalkot	42·80								
			Bágevádi	42·69								
			Muddebíhál	40·43								
Kánara	.....	...	.....	...	Honávar	39·30	Bhatkal Petha ...	32·45	Siddápur	29·73	.....	...
					Kumta	36·46			Mungod Petha ...	25·28		
					Ankola Petha	36·09			Sirsi	24·31		
					Kárwár..	35·05			Haliyál and its petha Supa	23·04		
									Yellápur	21·63		
Eastern Guiarát Registration District.												
Surat	.....	...	Olpád	46·37	Párdi	36·87	.....	...	.....	...	.....	...
			Bárdoli...	43·99								
			Bulsár	43·15								
			Mándvi...	42·75								
			Chikhli...	42·05								
			Chorási...	41·39								
			Jalálpor	40·48								
Broach	.....	...	Vágra	44·95	Amod	39·88	.....	...	.....	...	.....	...
			Jambusar	42·30								
			Broach	41·55								
			Anklesvar and its petha Hánsot	40·38								
Kaira	.....	...	Borsad	42·49	Thásra	38·47	.....	...	.....	...	.....	...
					Ánand	38·45						
					Mehmadabad	37·81						
					Mátar	37·71						
					Nadiád	37·69						
					Kapadvanj	37·09						
Panch Maháls	.....	...	.....	...	Godhra	38·41	Jhálod	34·64	.....	...	.....	...
					Hálol	37·02	Dohad	33·91				
							Kálol	33·70				

Ahmedabad	Gogha	52·36	Viramgám	44·70	Dholka	37·84	Daskroi...	34·27	.. ...	...	.....	...
			Dhandhuka	43·44			Parántij	34·21				
							Sánand	33·91				
Sind Registration District.												
Karáchi	.....	...	.....	..	.....	...	Sujával...	31·60	Dádú	28·21	Sákro	19·34
							Mirpur Batoro... ...	30·52	Johi		Sháhbandar... ...	16·68
									Sehwan ...		Tatta	16·43
									Mánjhand	27·23	Kohistan	10·62
									Ghorabari	22·41	Karáchi	10·07
									Kotri	22·40	Jati	9·24
Hyderabad...	Naushahro	53·02	Kandiáro	41·97	.....	...	Sákrand	33·03	Tando Alahyar ...	24·85	Mirpur Khás ...	17·85
			Moro	40·48					Dero Mohbat	24·74	Hála	17·70
									Sháhdádpur	24·61	Tando Bágo... ...	10·71
									Guni	23·26	Badin	10·61
									Hyderabad	22·46		
Thar and Párkar	Mitti	56·52	Dipla	44·82	.....	...	.....	...	Sánghar	27·36	.....	...
	Nagar	51·82	Chachra	41·65					Khipra	26·69		
									Umarkot	23·27		
Shikárpur...	.....	...	.....	...	Naushahro	38·40	Sukkur...	34·74	Ghotki	29·90	Ubauro	15·18
					Kakar	37·62	Kambar ...		Shikárpur	29·71		
					Labdarya ...		Rato-dero ...	32·68	Lárkhána	29·55		
					Mehar	37·37	Shahdádpur ...		Rohri	23·56		
					Nasirabad ...		Mirpur	31·58				
Upper Sind Frontier ...	.....	...	.....	...	Jacobabad	35·38	.....	...	Thal	26·17	.... .	...
									Kashmor	23·75		

Abstract.

Total ...	14	71	43	37	45	12

11. It will be seen that 14 tálukás record a very high rate of above 50 per 1,000 of population, whilst among 71 rural registration circles it was between 40 and 50 per 1,000. In 43 it closely approached the assumed standard (40 per 1,000), whilst in 37 it was low, and probably inaccurate, being 30 to 35 per 1,000, and in 45 it was decidedly inaccurate, as it ranged between 20 and 30 per 1,000. In 12 it was extremely inaccurate, being below 20 per 1,000; but 11 of these tálukás are in Sind, where the registration of births, although a great improvement has taken place, is still, as I have previously noticed, defective, the 12th being the táluka of Taloda, a wild and mountainous region in Khándesh, chiefly inhabited by Bhils, where the difficulties of supervision over the registering agency are great.

12. In Khándesh—except in the towns, where it is very low—the registration of births is very fairly carried out in all the tálukás, with the following exceptions:—Bhusával with its petha Edalabad, Jámner, Sháháda, Pimpalner and its petha Nizámpur, and Taloda, in which it is deplorably low.

In Násik more attention is required in Niphád, Yeola, Násik, and Igatpuri.

In Thána the registration of births is neglected in all the tálukás, especially in Sháhápur, Bhiwndi, Máhím, Sálsette, and Bassein.

In Kolába it is neglected in all the tálukás, especially in Mahád and Mángaon.

In the Ahmednagar Collectorate, registration is well carried out, except in the Akola Táluka.

In Poona it is well attended to in Indápur, Junnar, Purandhar, and Haveli, but requires more attention in Khed, Bhimthadi, Sirur, and especially in Mával.

In Sholápur it is well carried out throughout the Collectorate.

In Sátára, too, it is well attended to; but Válva, Jávli, and Malcolm Peth require more supervision.

In Ratnágiri the registration of births is deplorably neglected throughout the Collectorate.

In Belgaum it is well carried out in all the tálukás, except in Khánápur, where it is a little low.

In Dhárwár it is well attended to throughout the Collectorate.

In Bijápur it is carefully carried out in all the tálukás.

In Kánara more attention is required in Bhatkal Petha, Siddápur, Mundgod Petha, Sirsi, Haliyál and its petha Supa, and Yellápur.

In Surat it is well carried out, except in Párdi, where more attention is required.

In Broach it is carefully attended to in all tálukás.

In Kaira, although fairly carried out, it requires more attention in all the tálukás, except Borsad, where it is well attended to.

In the Panch Maháls it is fairly carried out in Godhra and Hálol, but in the remaining tálukás it requires more attention.

In Ahmedabad it is well carried out in Gogha, Viramgám, and Dhandhuka, and fairly so in Dholka, but requires more attention in Daskrohi, Parántij, and Sánand.

In Karáchi it is neglected in all the tálukás.

In Hyderabad, with the exception of Nausháhro, Kandiáro, and Moro, it requires more attention in all the remaining tálukás.

In Thar and Párkar it has received much attention in 4 tálukás, but in Sánghar, Khipra, and Umarkot it is very much neglected.

In Shikárpur it is fairly carried out in Nausháhro, Kakar, Labdarya, Mehar, and Nasirabad, but requires more attention in the remaining tálukás.

In the Upper Sind Frontier it is fairly carried out in Jacobabad, but requires more attention in the remaining tálukás.

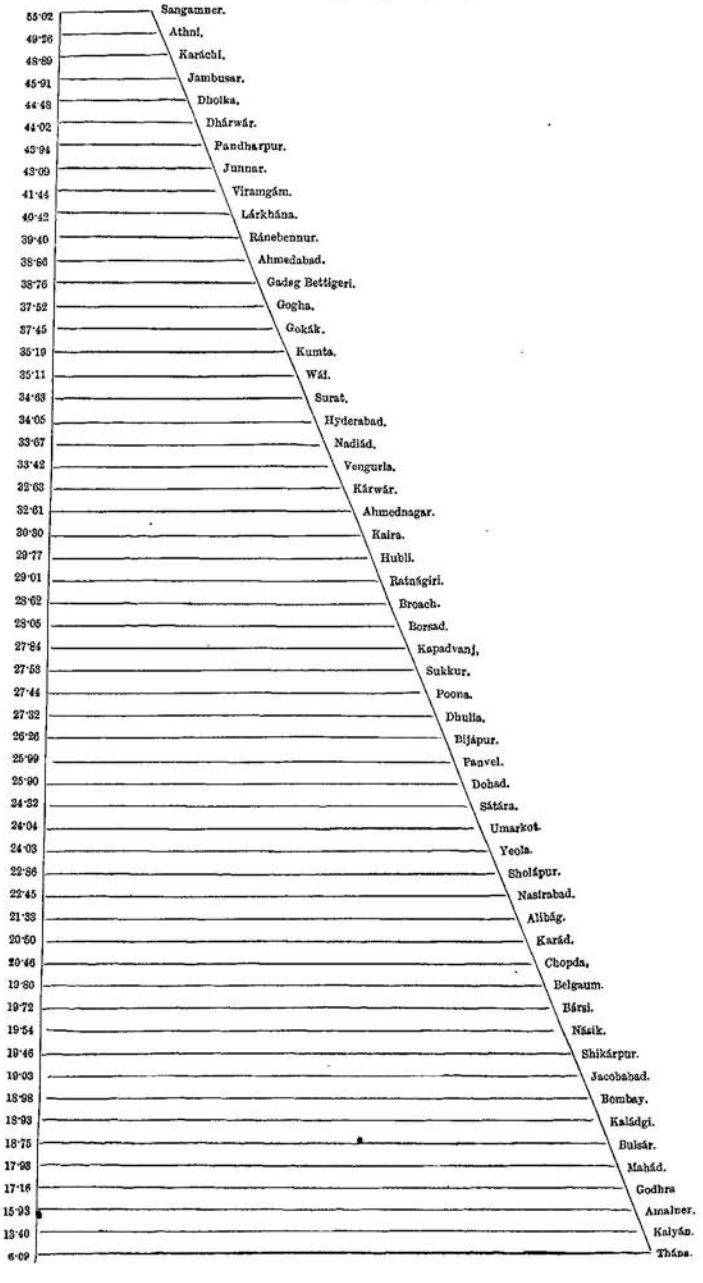
I, therefore, hope that Government will be pleased to call the especial attention of the Collectors, in the following districts, to the necessity for a more careful examination of the birth registers in their respective Collectorates, and that they will require from the village officers a more correct registration of births:—

Thána.	Hyderabad.
Kolába.	Thar and Párkar.
Ratnágiri.	Shikárpur.
Kánara.	Upper Sind Frontier.
Karáchi.	

Birth-rate in sequence in towns.

13. The following diagram shows the recorded birth-rate, in each town in the Presidency, arranged in sequence of the highest birth-rate per 1,000 of population:—

Recorded Birth-rate per 1,000 of Population in Towns.



14. It will be seen that, out of the 56 towns in the Presidency, 10 have returned a birth-rate exceeding 40 per 1,000. Improvement over last year is noticed in the towns of Panvel and Sukkur, in which, although the rates cannot be accepted as even approximately correct, birth-rates of 25·99 and 27·53 per 1,000, respectively, were recorded against 13·91 and 15·33 in 1885. The most remarkable increase took place in the town of Lárkhána, where a birth-rate of 40·42 per 1,000 was recorded against 29·04 in 1885. In many towns, however, the registration of births is still much neglected, and particularly, as noticed last year, in zilla stations, where one would have supposed the wishes of Government would have been more strictly attended to. For example, in the town of Thána, a birth-rate of only 6·09 per 1,000 was recorded against 11·41 in 1885, in the town of Alibág a birth-rate of 21·33 was registered against 28·39, and in the City of Poona 27·44 against 29·36 in 1885. In the towns of Sátára and Belgaum the recorded birth-rates were, respectively, 24·32 and 19·86 per 1,000 against 31·48 and 23·06 in 1885. Birth-rates—such as Thána 6·09 per 1,000, Kalyán 13·40, Amalner 15·93, Godhra 17·16, and those returned by Mahád, Balsár, Kaládgi, Bombay, Jacobabad, Shikárpur—are not worth the paper they are written upon. These and other municipalities, which have returned similarly inaccurate birth-rates, cannot be performing their duty properly, and I hope Government may be pleased to record its displeasure at such neglect, and to impress on the Municipal Commissioners the absolute necessity of much greater attention being paid to this most important subject. The undermentioned municipalities deserve credit for the attention they have paid to the registration of births :—

Collectorates.	Municipalities.	Birth-rate.
Ahmednagar	Sangamner	55·02
Belgaum	Athni	49·26
Karáchi	Karáchi	48·89
Broach	Jambusar	45·91
Ahmedabad	Dholka	44·48
Dhárwár	Dhárwár	44·02
Sholápur	Pandharpur	43·94
Poona	Junnar	43·09
Ahmedabad	Viramgám	41·44
Shikárpur	Lárkhána	40·42

15. The above tables show that a high birth-rate is not confined to any particular part of the Presidency. Possibly, in some cases, it may be due to the population of the town or táluka having been underestimated; but, even allowing for this cause of error, I think it may be taken as a fair indication that the people are at length beginning to record more correctly the births that occur in their families. This result is also, in a great measure, in my opinion, due to the interest displayed by district officers, and bears testimony to a rigid examination having been made of the birth registers by them as well as by the officers of the Sanitary Department, who, since the compilation of vital statistics was entrusted to them, have effected a great improvement in this respect.

16. In my opinion, in taking 40 per 1,000 to represent the normal birth-rate, we have formed too low a standard, and I believe that 45 per 1,000 will be found to be a nearer approximation to the truth; but, in either case, it is evident much greater attention to registration is required in very many Collectorates.

Birth-rates in Cantonments.

17. The following table contrasts the recorded birth-rate in each cantonment in British territory in 1886 with the results of the previous year :—

Cantonments.	Birth-rate, 1885.	Birth-rate, 1886.
Devláli	36·83	20·26
Málegaon	37·57	38·89
Ahmednagar	16·56	18·09
Poona	24·96	28·95
Kirkee	25·84	37·92
Belgaum	16·18	16·07
Ahmedabad...	17·53	35·05

In each of the above cantonments it will be seen that the recorded birth-rate is below the standard (40 per 1,000); but, excepting Devláli and Belgáum, it exceeds that registered in 1885. Much greater attention appears to have been paid to this matter in the cantonment of Ahmedabad, as it is double that registered in 1885, but the result recorded can only be considered as approximately correct.

Still-born.

18. During the year 1886, 4,629 boys and 3,808 girls, or a total of 8,437 children against 5,182 boys and 4,266 girls, or a total of 9,448 in 1885, were registered as still-born. These births occurred in the following Collectorates :—

Collectorates.	Recorded Births.	Still-born.			Percentage of Still-born to born alive.
		Urban.	Rural.	Total.	
Khándesh	44,811	2	370	372	0·83
Násik	28,147	35	315	350	1·24
Thána	22,657	1	150	151	0·07
City of Bombay	14,679	1,147	...	1,147	7·81
Kolába	14,551	2	258	260	1·79
Ahmednagar	32,188	9	120	129	0·40
Poona	31,165	59	113	172	0·55
Sholápur	25,999	1	188	189	0·73
Sátára	44,988	35	393	428	0·95
Ratnágiri	25,077	9	546	555	2·21
Belgaum	35,821	25	495	520	1·45
Dhárwár	40,261	100	570	670	1·42
Bijápur	27,182	4	402	406	1·49
Kánara	12,989	45	662	707	5·44
Surat	24,795	267	215	482	1·94
Broach	13,175	48	112	160	1·21
Kaira	30,643	23	150	173	0·56
Panch Mahále	8,757	5	67	72	0·82
Ahmedabad	33,287	78	280	358	1·08
Karáchi	12,659	124	165	289	2·28
Hyderabad	19,966	162	84	246	1·23
Thar and Párkar	7,783	3	69	72	0·93
Shikárpur	26,671	115	389	504	1·89
Upper Sind Frontier	3,302	4	21	25	0·76
Presidency ...	5,81,553	2,303	6,134	8,437	1·45

19. A high percentage of still-born to born alive is again noticed in the City of Bombay (7·81 against 8·63 in 1885) and in Kánara (5·44 against 5·45). The Deputy Sanitary Commissioner, Southern Registration District, made an especial enquiry into the cause of the high rate of still-born children in the

Kánara Collectorate, and his able report was submitted to Government. Dr. Channer ascribes it to the fact that the population is generally enfeebled by malaria and the other insanitary conditions to which they are exposed.

DEATHS.

Number of Deaths.

20. In 1886, among the civil population in the 285 rural, town, and cantonment circles in the Presidency of Bombay, the deaths of 200,140 males and 181,045 females, or a total of 381,185 persons were recorded. In the previous year, 473,591 deaths, or 92,406 more than in 1886, were registered. The following statement shows the number of deaths recorded in each year since 1876 :—

1876	368,260	1882	343,418
1877	627,708	1883	420,198
1878	532,951	1884	408,409
1879	387,542	1885	473,591
1880	328,673	1886	381,185
1881	381,450		

so that, as compared with the 3 previous years, 1886 was a tolerably healthy year.

Death-rate.

21. The computed death-rate per 1,000 of population in 1886 was 23·17 against 28·78 in 1885 and a decennial mean of 26·16. Omitting Sind, where the mortuary registration is still extremely defective, the recorded death-rate in the other parts of the Presidency amounted to 24·12 per 1,000 of population.

Male and Female Death-rates.

22. The millesimal ratio of males dying to males living was 23·55 and of females dying to females living 22·75. In 1885 these ratios were, respectively, 29·28 and 28·25. For every 100 females who died, 110·55 deaths among males were registered, but these proportions vary considerably in the following Collectorates :—

In Khandesh the ratio of male to female deaths was			115·32	per cent.
„ Násik	do.	do.	115·01	do.
„ Thána	do.	do.	113·79	do.
„ Ahmednagar	do.	do.	114·05	do.
„ Kánara	do.	do.	112·67	do.
„ Ahmedabad	do.	do.	114·06	do.

As usual, the greatest discrepancy is to be found in Sind.

In Karáchi Collectorate	129·15	male deaths were recorded for every	100 female deaths.	
„ Hyderabad	127·19	do.	do.	do.
„ Thar and Párkar	126·39	do.	do.	do.
„ Shikárpur	124·32	do.	do.	do.
„ Upper Sind Frontier	122·98	do.	do.	do.

Deaths by Districts.

23. The following table shows, for each registration district, the population enumerated at the census of 1881, the number of deaths recorded in 1886 by sexes, and their ratios per 1,000 of population. The highest ratio was reported in the Eastern Gujarát Registration District and the lowest in Sind :—

Districts.	Population according to Census of 1881.			Number of Deaths.			Ratio per 1,000 of Population.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
Western Registration District ..	2,154,823	1,927,007	4,081,830	52,516	46,649	99,165	24·37	24·21	24·29
Central do. do.	2,137,095	2,156,681	4,293,776	50,244	46,834	97,078	23·51	21·72	22·61
Southern do. do.	1,417,136	1,390,118	2,807,254	35,107	33,705	68,812	24·77	24·25	24·53
Eastern Gujarát Registration District.	1,471,834	1,385,897	2,857,731	38,561	35,096	73,657	26·20	25·32	25·77
Sind Registration District	1,316,830	1,096,993	2,413,823	23,712	18,761	42,473	18·01	17·10	17·60
Presidency ..	8,497,718	7,956,696	16,454,414	200,140	181,045	381,185	23·55	22·75	23·17

24. The next table shows the recorded deaths in each Collectorate in 1886 as compared with 1885 and the mean of the previous 10 years :—

Deaths by Collectorates.

Districts.	Number.	Collectorates.	Population according to Census of 1881.	Mean for 10 years, 1876—1885. Number of Deaths.	Mean for 10 years, 1876—1885. Ratio per 1,000 of Population.	1885. Number of Deaths.	1885. Ratio per 1,000 of Population.	1886. Number of Deaths.	1886. Ratio per 1,000 of Population.
Western Registration District.	1	Khándesh	1,237,231	29,543	26·07	36,339	29·37	35,028	28·31
	2	Násik	781,206	21,312	28·48	29,281	37·47	17,674	22·62
	3	Thána	907,367	18,133	23·19	21,736	26·92	18,375	20·99
	4	City of Bombay	773,196	23,252	32·80	21,561	27·89	19,812	25·62
	5	Kolába	482,830	9,485	20·53	10,472	21·69	9,776	20·24
Central Registration District.	6	Ahmednagar	751,228	21,063	28·33	25,633	34·12	19,991	26·61
	7	Poona	900,621	21,991	24·33	30,033	33·35	19,855	22·04
	8	Sholápur	522,487	19,081	29·34	21,369	36·69	14,191	24·36
	9	Sátára	1,002,350	29,030	27·91	36,063	34·80	27,232	25·64
	10	Ratnágiri	997,090	17,604	17·66	14,653	14·70	15,803	15·85
Southern Registration District.	11	Belgaum	864,014	31,064	34·46	27,646	32·00	20,031	23·19
	12	Dhárwár	882,907	32,239	34·46	28,829	32·65	24,509	27·75
	13	Bijápur	638,493	23,313	32·06	16,120	25·24	12,159	19·02
	14	Kánara	421,840	13,657	33·29	13,014	30·85	12,122	28·73
Eastern Gujarát Registration District.	15	Surat	614,198	16,966	27·78	18,052	29·39	16,186	26·35
	16	Broach	326,230	10,646	31·44	12,392	37·90	9,715	29·71
	17	Kaira	804,800	23,211	29·24	27,728	34·45	20,193	25·09
	18	Panch Mahále	255,479	5,752	23·18	5,477	21·44	5,481	21·45
	19	Ahmedabad	850,324	25,019	29·68	28,698	33·51	22,062	25·79
Sind Registration District.	20	Karáchi	478,688	8,033	17·81	12,712	26·56	8,701	18·17
	21	Hyderabad..	754,624	10,191	13·80	14,975	19·84	14,599	19·34
	22	Thar and Párkar	203,344	2,935	15·23	2,951	14·51	3,269	16·07
	23	Shikárpur	852,986	10,882	13·36	15,053	17·64	14,261	16·24
	24	Upper Sind Frontier	124,151	1,698	10·25	1,890	15·29	1,543	12·43

ABSTRACT.

Western Registration District	4,081,830	101,725	26·53	119,389	29·15	99,165	24·29
Central do. do.	4,293,776	110,489	25·19	123,656	29·96	97,078	22·61
Southern do. do.	2,807,254	100,273	33·71	85,609	30·49	68,812	24·51
Eastern Gujarát Registration District	2,857,731	81,594	28·79	92,347	32·31	73,657	25·77
Sind Registration District	2,413,823	33,139	14·29	47,590	15·29	42,473	17·60
Presidency ..	16,454,414	427,220	26·16	473,591	28·78	381,185	23·17

In 1886 the recorded death-rate per 1,000 of population was lower than in 1885 in each of the Collectorates, except Ratnágiri, Panch Mahále, Hyderabad, and Thar and Párkar. In the Collectorates of Ratnágiri and Thar and Párkar the recorded death-rates (15·85 and 16·07 per 1,000 respectively) are manifestly very incorrect, but they are slightly in excess of those for 1885 (14·70 and 14·51). In the Panch Mahále and Hyderabad the recorded death-rates, 21·45 and 19·34, in 1886 were nearly the same as in 1885—21·44 and 19·84 respectively.

It was also lower than the annual mean of the preceding 10 years in 18 of the 24 Collectorates. The exceptions being

Khándesh.	Thar and Parkár.
Karáchi.	Shikárpur.
Hyderabad.	Upper Sind Frontier.

25. The next statement shows the deaths, in 1886, by Collectorates in sequence of highest rates, which range from 29·71 per 1,000 in Broach to 12·43 in Upper Sind Frontier. In 1885 the maximum and minimum ratios (37·90 and 14·51 per 1,000, respectively,) were in Broach and Thar and Párkar Collectorates :—

Death-rate by Collectorates in sequence

Collectorates.	Number of Deaths.			Ratio per 1,000 of Population.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
Broach	5,082	4,633	9,715	30·16	29·34	29·71
Kánara	6,422	5,700	12,122	28·80	28·67	28·73
Khándesh	18,760	16,268	35,028	29·66	26·92	28·31
Dhárwár	12,376	12,133	24,509	28·00	27·52	27·75
Ahmednagar	10,671	9,320	19,991	27·96	25·21	26·61
Surat	8,361	7,825	16,186	27·32	25·39	26·35
Ahmedabad	11,766	10,316	22,082	26·78	24·74	25·79
Sátára	13,631	13,607	27,238	25·60	25·68	25·64
City of Bombay ...	10,257	9,555	19,812	22·07	30·98	25 62
Kaira	10,613	9,580	20,193	24·87	25·34	25·09
Sholápur	7,420	6,771	14,191	25·17	23·54	24·36
Belgaum	10,130	9,901	20,031	23·31	23·05	23·19
Násik	9,454	8,220	17,674	23·79	21·42	22·62
Poona	10,349	9,506	19,855	22·74	21·34	22·04
Panch Mahále	2,739	2,742	5,481	20·81	22·06	21·45
Thána	8,977	7,898	16,875	21·58	20·19	20·90
Kolába	5,068	4,708	9,776	2[illegible]·76	19·72	20·24
Hyderabad	8,173	6,426	14,599	20·07	18·50	19·34
Bijápur	6,179	5,971	12,150	19·45	18·61	19·02
Karáchi	4,904	3,797	8,701	18·44	17·85	18·17
Shikárpur	7,959	6,402	14,361	17·26	16·33	16·84
Thar and Párkar ...	1,825	1,444	3,269	16·24	15·88	16·07
Ratnágiri	8,173	7,630	15,803	17·28	14·56	15·85
Upper Sind Frontier ...	851	692	1,543	12·13	12·81	12·43
Presidency ...	200,140	181,045	381,185	23·55	22·75	23·17

Deaths by Sexes.

26. This statement also shows that in the City of Bombay, Kaira, and the Panch Mahále the recorded death-rate for females is higher than the death-rate of males. In Kánara, Sátára, Belgaum, and the Upper Sind Frontier the death-rates of males and females were equal. In the remaining Collectorates the death-rate for males everywhere exceeds that for females. In 1885 the female death-rate exceeded that of male in the City of Bombay alone.

Birth and death-rates compared by Collectorates.

27. In the City of Bombay the recorded birth-rate was much below the registered death-rate (18·98 and 25·62 per 1,000 respectively). The difference can only be ascribed to defective registration. In the Collectorate of Kanára the recorded birth-rate (30·79 per 1,000) in 1886 was slightly higher than the recorded death-rate (28·73). In all other Collectorates the recorded birth-rates are considerably higher than the registered death-rates. This is especially noticed in the following Collectorates:—

Collectorates.	Birth-rate, 1886.	Death-rate, 1886.
Bijápur	42·57	19·02
Thar and Párkar	38·27	16·07
Sholápur	44·63	24·36
Belgaum	41·46	23·19
Dhárwár	45·60	27·75
Sátára	42·35	25·64
Ahmednagar	42·85	26·61

In each of the above Collectorates the registration of births has been very creditably performed; but the death-rates recorded in Bijápur and in Thar and Párkar are manifestly incorrect.

Deaths by Ages.

28. The figures given below show the total deaths, in 1886, under different ages, as also the ratio per 1,000 living, calculated on the population of each age period enumerated at the census of 1881, and the percentage on total deaths:—

Age Periods.	Population according to Census of 1881.	Deaths.	Ratio per 1,000 of Population.	Percentage on Total Deaths.
Under 1 year	457,644	92,251	201·58	24·20
1 and under 5 years	1,714,283	78,028	45·52	20·47
5 do. 10 do.	2,387,644	15,746	6·47	4·13
10 do. 15 do.	1,877,474	9,518	5·07	2·50
15 do. 20 do.	1,287,360	11,896	9·24	3·12
20 do. 30 do.	2,984,550	32,428	10·87	8·51
30 do. 40 do.	2,459,456	32,168	13·08	8·44
40 do. 50 do.	1,543,353	29,700	19·24	7·79
50 do. 60 do.	1,000,059	31,456	31·45	8·25
60 years and upwards	742,591	47,994	64·63	12·59
Total ...	16,454,414	381,185	23·17	100·

The mortality amongst infants under 1 year and children above 1 year but under 5, is, as usual, terribly high, in comparison with other periods of life. In fact, the deaths in children under 5 years of age formed 44·67 per cent. of the total deaths. As repeatedly pointed out, the extremely high rate of mortality among children of tender years affords unmistakeable proof of local causes of insanitation throughout the Presidency. The period of greatest immunity was in the age of above 10 and under 15, the rate being 5·07 per 1,000. For those "above 60 and upwards" the mortality was at the rate of 64·63 per 1,000. The percentage on total deaths amongst infants under 1 year is 24·20 against 21·24 in 1885. For those above 1 and under 5 the percentage on total deaths is 20·47 against 21·04 in 1885. For old people above 60 and upwards the percentage on total deaths is 12·59 against 12·03 in 1885. The total deaths by sexes under the different ages in 1886 in each Collectorate are given in Annual Form IV. in the Appendix.

Deaths by Caste or Class.

29. The deaths by caste in each Collectorate are given in Annual Form No. V. in the Appendix. By the census of 1881, the Mahomedan population numbered 3,107,171 persons, amongst whom, in 1886, 58,625 deaths were recorded, against 69,352 in 1885, the death-rate per 1,000 being 18·87 against 22·33 in 1885. The Hindu population amounted to 13,128,587 persons, amongst whom 316,076 deaths, or 24·08 per 1,000 of population, were reported during 1886. In 1885 the total deaths amongst this race was 397,910, equal to a death-rate of 30·31 per 1,000. Amongst the Christian population numbering 138,326 persons, 2,301 deaths were reported during the year against 2,508 in 1885, the death-rate being 16·63 against 18·13 per 1,000 in 1885. Under the heading "Other Castes" are included all those not belonging to either of the above sects, who, by the census of 1881, numbered 80,330 persons, amongst whom during 1886 there were 4,183 deaths against 3,821 in 1885, the death-rate being 52·07 per 1,000 against 47·57 in 1885. For Mahomedans the maximum rate (30·43 per 1,000) took place during the year in the City of Bombay, and the minimum (11·10) in Thar and Párkar; this is almost the same ratio as in the Upper Sind Frontier Collectorate, where the death-rate was 11·12. In 1885 these results were 35·14 and 10·54, and they were reported as having occurred in the Collectorates of Poona and Thar and Párkar. Amongst Hindus the maximum rate (30·19) in 1886 was in the Broach Collectorate and the minimum (15·77) in Ratnágiri. In 1885 they occurred in the same Collectorates—Broach (38·72) and Ratnágiri (14·63). The maximum death-rate, during the year, amongst Christians was 31·83, and was reported from the Dhárwár Collectorate and the minimum (4·35) from Upper Sind Frontier; this is almost the same as in Khándesh, Sátára, and Karáchi, where the

rate was 4·36 in Khándesh, 4·51 in Sátára, and 4·49 in Karáchi. In the Collectorates of Panch Maháls and Thar and Párkar no deaths amongst Christians were reported in 1886.

Deaths by Causes.

30. The subjoined table shows the deaths, in 1886, arranged according to the specified causes laid down by the Government of India, and contrasted with the results for 1885 and the mean of the preceding 10 years. The causes of deaths will be briefly noticed in the next section.

Causes of Deaths.	Mean for 10 years, 1876—1885.		1885.		1886.	
	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.
Cholera	25,738	1·58	37,287	2·27	167	0·01
Small-pox	7,841	0·48	2,646	0·16	876	0·05
Fevers	282,220	17·28	314,237	19·10	281,450	17·10
Bowel-complaints ...	36,093	2·21	45,056	2·73	36,612	2·23
Injuries	6,320	0·39	5,577	0·34	5,692	0·35
Other Causes... ...	69,008	4·22	68,788	4·18	56,388	3·43
All Causes ...	427,220	26·16	473,591	28·78	381,185	23·17

Deaths by Months.

31. The monthly distribution of deaths in 1886 is shown in the following table, contrasted with the deaths in 1885 and the mean for 10 years. During 1886 the greatest number of deaths (35,973) took place in August, as usual, and the least (27,460) in June, which is abnormal, as generally the minimum number of deaths takes place in February. In 1885 the greatest number (50,348) was in July and the least (30,842) in February.

Months.	Deaths from all Causes.					
	Mean for 10 years, 1876—85.	Ratio per 1,000 of Population.	1885.	Ratio per 1,000 of Population.	1886.	Ratio per 1,000 of Population.
January	33,401	2·04	33,187	2·02	33,788	2·05
February	29,658	1·82	30,842	1·87	29,325	1·78
March	32,438	1·99	33,703	2·05	29,858	1·81
April	31,891	1·95	31,527	1·92	30,548	1·86
May	33,611	2·06	35,647	2·17	29,810	1·81
June	33,771	2·07	43,317	2·63	27,460	1·67
July	38,802	2·38	50,348	3·06	31,511	1·91
August	42,445	2·60	48,757	2·96	35,973	2·19
September	38,839	2·38	42,946	2·61	33,910	2·06
October	37,627	2·30	45,542	2·77	31,853	1·94
November	38,466	2·35	40,507	2·46	32,586	1·98
December	36,271	2·22	37,268	2·26	34,563	2·11
Year ...	427,220	26·16	473,591	28·78	381,185	23·17

Number of Circles.

32. The statistical returns are received from 222 rural and 56 town circles, from 7 cantonments in British and 9 in Foreign territory. The aggregate population of the census of 1881 of the rural circles is 14,337,234, of the town circles 2,056,025,

and of the cantonments in British territory 61,155, including Europeans and Eurasians and fighting men, or a total of 16,454,414.

Death-rates in Rural Circles.

33. The following table compares, in one statement, the death-rate in each táluka (rural registration circle) in the Presidency and in Sind; and it will be seen that, in Mundgod Petha, Kánara Zilla, there was an extremely high death-rate of 40·77 per 1,000 (the causes of this high death-rate will be noticed in a subsequent para). 28 tálukás record death-rates between 30 and 40, and 50 tálukás between 25 and 30, whilst 68 return death-rates between 20 and 25, and in 75 the death-rate recorded was below 20 per 1,000.

Collectorates.	REGISTRATION OF DEATHS. — DEATH-RATES AMONG THE 222 RURAL CIRCLES OF REGISTRATION.									
	Above 40 per 1,000.		30 to 40 per 1,000.		25 to 30 per 1,000.		20 to 25 per 1,000.		Below 20 per 1,000.	
Western Registration District.										
Khándesh	.....	...	Jámner	35·48	Erandol	29·95	Sháháda	24·07	Pimpalner and its petha Nizámpur.	19·67
			Sávda and its pethás Yával and Ráver.	34·33	Amalner and its petha Párola.	28·45	Nandurbár	20·42	Taloda	13·46
			Bhusával and its petha Edalabad.	33·35	Chálisgaon	28·22				
			Jalgaon	32·57	Páchora and its petha Bhadgaon.	27·95				
			Chopda	31·52	Shirpur	26·24				
			Sindkheda	31·27						
			Dhulia	30·86						
Násik	.....	...	Nándgaon	31·61	Báglán	25·91	Chándor	23·95	Násik	17·20
					Málegaon	25·83	Sinnar	23·86	Igatpuri	15·75
							Kalvan	22·98		
							Peint...	22·92		
							Dindori	22·91		
							Yeola	21·44		
							Niphád	20·35		
Thána	.....	...	.....	...	Váda	26·19	Bhiwndi	24·53	Bassein	19·13
					Murbád	25·79	Kalyán	22·99	Máhím	16·66
							Sháhápur	22·46	Dáhánu	16·65
							Karjat	21·80		
							Sálsette	20·55		
Kolába	.....	...	.....	...	.....	...	Roha	24·33	Mángaon	18·54
							Alibág	24·05	Mahád	15·96
							Pen and its petha Nágothna.	22·08		
							Panvel	21·17		
Central Registration District.										
Ahmednagar	...	...	Jámkhed	30·98	Sangamner	29·97	Párner	22·02	.....	...
					Nagar	29·66	Shrígonda	21·73		
					Karjat	27·71	Akola	21·12		
					Nevása	27·14				
					Shevgaon	26·83				
					Kopargaon	26·24				
					Ráhuri	25·63				

Poona	...	...	...	...	...	...	...	Indápur	24·92	Bhimthadi	18·82
								Junnar	24·44	Sirúr	18·30
								Haveli	24·10	Mával	16·41
								Purandhar	22·90		
								Khed...	20·77		
Sholápur	...	...	...	...	Karmála	27·83	Mádha	24·31	Sholápur	19·67
					Bársi	25·14	Sángola	23·28	Málsiras	19·65
							Pandharpur...	22·65		
Sátára...	...	...	...	...	Khatáv	29·51	Khánápur	23·66	Malcolm Peth	18·21
					Sátára	29·08	Tásgaon	23·34		
					Karád	28·83	Pátan	22·66		
					Wái	28·32	Válva	22·62		
					Mán	27·67	Jávli	22·49		
					Koregaon	27·43				
Ratnágiri	...	...	...	...	...	...	...	...	Ratnágiri	17·30
									Málvan	16·95
									Chiplún	16·36
									Dápoli	16·36
									Devgad	16·18
									Rajápur	14·80
									Khed	14·02
									Sangameshvar	13·06
Southern Registration District.												
Belgaum	...	...	Khánápur...	30·35	Belgaum	25·03	Sampgaon	23·51	Athni	19·75
							Chikodi	23·07		
							Gokák	22·16		
							Parasgad	21·09		
Dhárwár	...	...	Kalghatgi...	38·98	Karajgi	25·73	Ránebennur...	24·45	...	...
			Hángal	34·40	Hubli	25·60	Gadag	24·21		
			Kod	33·65	Ron	25·45	Mundargi Petha			
			Bankápur	31·66			Navalgund	21·41		
			Dhárwár	30·16			Nargund Petha			
			Mugúd Petha							
Bijápur	...	...	...	...	...	—	Sindgi	24·67	Bágalkot	18·69
							Indi	20·77	Hungund...	18·61
									Bádámi	18·56
									Bágevádi	17·93
									Bijápur	17·90
									Muddebihál	16·99
Kánara	Mundgod Petha	40·77	Sirsi	32·80	Kumta	27·80	Kárwár	24·40	...	...
			Yellápur	31·23	Ankola Petha	27·20	Bhatkal Petha	22·08		
			Haliyál	30·91	Honávar	26·99				
			Supa Petha							
			Siddápur	30·60						

Collectorates.	REGISTRATION OF DEATHS. — DEATH-RATES AMONG THE 222 RURAL CIRCLES OF REGISTRATION.									
	Above 40 per 1,000.		30 to 40 per 1,000.		25 to 30 per 1,000.		20 to 25 per 1,000.		Below 20 per 1,000.	
Eastern Gujarát Registration District.										
Surat	.....	...	.....	...	Jalálpor ... ... Bulsár ... ... Chorási ... ... Olpád ... ... Bárdoli ... ... Mándvi ... ... Chikhli	29·00 28·80 28·59 28·32 27·66 25·68 25·08	Párdi	21·25	.....	...
Broach	.....	...	Vágra ... ... Broach ... ... Jambusar ... ... A'mod	32·50 31·18 30·77 30·30	Anklesvar ... Hánsot Petha ...	27·52	.....	...	.....	...
Kaira	.....	...	.....	...	Borsad ... ... Mátar ... ... Mehmádabad ... ... A'nand	28·80 26·72 25·53 25·08	Nadiád ... ... Thásra	24·01 23·77	Kapadvanj	18·83
Panch Maháls	.....	...	.....	...	.....	...	Kálol ... ... Hálol ... ... Jhálod ... ... Dohad	24·31 23·51 22·84 21·30	Godhra	18·01
Ahmedabad	.....	...	.....	..	Gogha ... ... Dholka ... ... Viramgám	27·30 26·42 26·22	Dhandhuka ... . Daskroi ... ... Sánand ... ... Parántij	23·88 21·80 21·24 20·26	.....	...
Sind Registration District.										
Karáchi	.....	...	.....	...	.....	...	Tatta	20·33	Kotri ... ... Mánjhand... ... .. Mirpur Batoro ... ... Dádú ... ... Johi ... ... Sehwan ... ... Ghorabári ... ... Sákro ... ... Sujáwal ... ... Sháhbandar ... ... Kohistan ... . Jati ... ... Karáchi	19·98 19·47 19·05 18·63 17·03 15·61 15·07 12·15 8·45 8·39 7·26

Hyderabad	.....	...	.....	...	Shahdádpur	26·26	Kandiáro	23·66	Dero Mohbat	17·04
							Naushahro	23·54	Hála	15·83
							Sakrand	23·25	Mirpur Khas	15·77
							Moro...	21·69	Hyderabad	13·48
							Guni	20·71	Tondo Bago	10·09
							Tando Alahyar	20·58	Badin	9·52
Thar and Párkar ...	.....	...	.....	...	.....	...	Kipra	22·12	Mitti	18·04
									Dipla	17·94
									Cháchra	16·09
									Nagar	14·64
									Umarkot	13·40
									Sánghar	11·61
Shikárpur	.....	...	.....	...	.....	...	Kakar	22·67	Sukkur	19·87
									Naushahro	19·04
									Labdarya...	17·89
									Mehar	
									Nasirabad	
									Kambar	16·35
									Rato-dero...	
									Shahdádpur	
									Rohri	15·89
									Ghotki	15·02
									Shikárpur	14·59
									Lárkhána	13·79
									Mirpur	13·78
									Ubauro	10·44
Upper Sind Frontier ...	.....	...	.....	...	.....	...	.....	...	Jacobabad	13·71
									Thul	11·34
									Kashmor	9·72
Total Rural Circles for the Presidency	1		28		50	...	68		75	

34. In Khándesh the registration of deaths is very fairly carried out, but more attention is required to the subject in the following tálukás:—Sháháda, Nandurbár, Pimpalner and its petha Nizámpur, and Taloda.

In Násik, excepting Nándgaon, Báglán, and Málegaon Tálukás, the registration is not well carried out, and in Násik and Igatpuri Tálukás it is much neglected.

In Thána, with the exception of Váda and Murbád Tálukás, the registration of deaths is much neglected throughout the Collectorate.

In Kolába the registration of deaths is much neglected throughout the Collectorate.

In Ahmednagar the registration of deaths appears to be carefully attended to, except in the Párner, Shrígonda, and Akola Tálukás, where improvement is required.

In the Poona Collectorate the registration of deaths is much neglected throughout the Collectorate.

In Sholápur, except in Karmála and Bársi Tálukás, the registration of deaths is neglected throughout the Collectorate.

In Sátára the registration of deaths is carefully attended to, but requires improvement in Khánápur, Tásgaon, Pátan, Válva, Jávli, and Malcolm Peth.

In Ratnágiri the registration of deaths is in a deplorable state, and utterly untrustworthy throughout the Collectorate.

In Belgaum, except in Khánápur and Belgaum Tálukás, the registration of deaths is neglected throughout the Collectorate.

In the Dhárwár Collectorate the mortuary registration is carefully attended to, but improvement is required in Ránebennur, Gadag, and its petha Mundargi, and Navalgund and its petha Nargund.

In the Bijápur Collectorate the registration of deaths is very backward throughout the Collectorate.

In Kánara the registration of deaths is well carried out, except in Kárwár Táluka and Bhatkal Petha.

In the Surat Collectorate the registration of deaths is very well carried out, except in Párdi Táluka.

In Broach the registration of deaths is well attended to.

In the Kaira Collectorate the registration of deaths is well attended to, except in Nadiád, Thásra, and Kapadvanj Tálukás.

In the Panch Maháls the registration of deaths is very backward throughout the Collectorate.

In Ahmedabad the registration of deaths is well attended to in Gogha, Dholka, and Viramgám, but in the remaining tálukás it requires improvement.

In the Karáchi Collectorate the registration of deaths is in a deplorable state, and utterly untrustworthy.

In the Hyderabad Collectorate, except in Shahdádpur Táluka, the registration of deaths is much neglected.

In the Thar and Párkar, Shikárpur, and Upper Sind Frontier Collectorates the registration of deaths is utterly untrustworthy.

I, therefore, hope that Government will be pleased to call the especial attention of the Collectors, in the following districts, to the necessity of making renewed and more effective efforts to improve the registration of deaths in their respective Collectorates:—

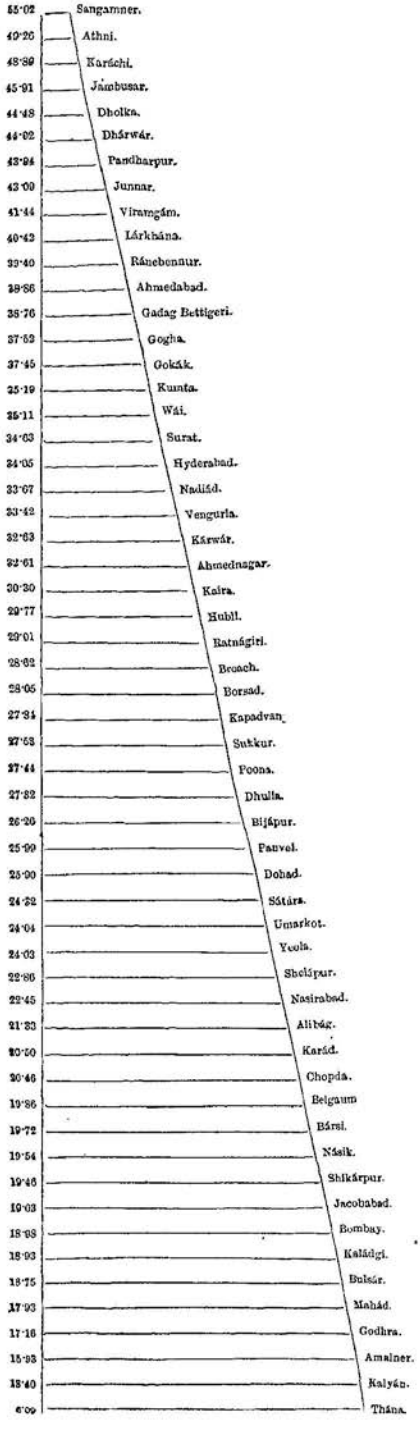
Násik.	Panch Maháls.
Thána.	Ahmedabad.
Kolába.	Karáchi.
Poona.	Hyderabad.
Sholápur.	Thar and Párkar.
Ratnágiri.	Shikárpur.
Belgaum.	Upper Sind Frontier.
Bijápur.	

35. We have at present, in India, not sufficient data at our command to form any very accurate opinion as to what the normal death-rate really is. Our system of registration, as ordered by the Government of India, does not allow us to take into account the natural increment of the population since the date of the preceding census. If it is allowable to express an opinion on this subject, I should say that, in those years when epidemic disease is not in movement, the normal death-rate in towns would range from 30 to 35 per 1,000, and in villages from 25 to 30. If this estimate is even approximately correct, it will be seen how very imperfect the registration of deaths is in many of the Collectorates; and in others, where they have been more correctly reported, what an unnecessary loss of life there is even in comparatively speaking healthy years. The majority of the deaths recorded in our statistics are due to preventible causes, and these high death-rates must continue until efficient measures are taken throughout the land to introduce a practical system of sanitation.

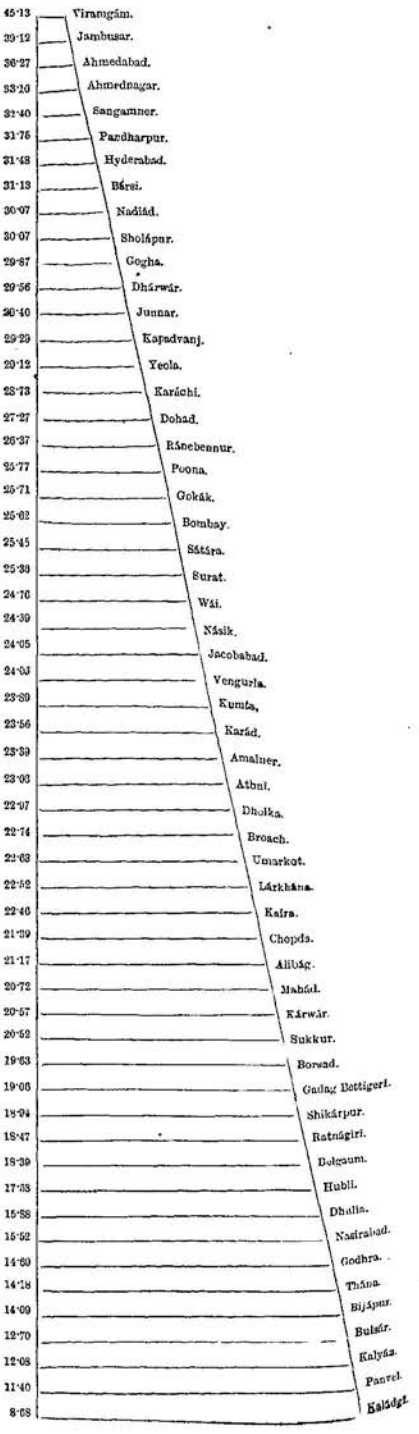
Birth and death-rates in sequence in towns.

36. It may be useful to show, side by side, the birth and death-rates in sequence in the town circles of this Presidency, in order to invite the especial attention of Government to the high death-rate that has taken place in some of them, and the miserably low birth-rate which has been recorded in others.

Birth-rate per 1,000.



Death-rate per 1,000.



37. An extremely high death-rate has been reported in several of the towns of the Presidency. The following tables show the statistics, by causes and by ages, in the first 4 towns in sequence of high death-rates :—

Deaths in Towns.

Towns.	Population according to Census of 1881.	Causes of Deaths.							Ratio per 1,000 of Population.						
		Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	Other Causes.	All Causes.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	Other Causes.	All Causes.
Viramgám	18,990	..	..	583	243	8	23	857	..	..	30·70	12·80	0·43	1·21	45·13
Jambusar	11,479	..	1	188	252	8	..	449	..	0·09	16·38	21·95	0·70	..	39·12
Ahmedabad	124,767	6	..	3,165	62	14	1,278	4,525	0·05	..	25·37	0·50	0·11	10·24	36·27
Ahmednagar	32,903	..	..	335	123	13	613	1,089	..	..	10·18	3·74	0·55	18·63	33·10

Age Periods.	Presidency.	Viramgá'm.			Jambusar.			Ahmedabad.			Ahmednagar.		
	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Percentage on Total Deaths.	Number.	Ratio per 1,000 of Population.	Percentage on Total Deaths.	Number.	Ratio per 1,000 of Population.	Percentage on Total Deaths.	Number.	Ratio per 1,000 of Population.	Percentage on Total Deaths.
Under 1 year	201·58	233	462·30	27·19	189	617·78	30·96	1,494	307·77	33·02	213	252·00	20·45
1 and under 5 years	45·52	224	130·23	26·14	93	91·09	20·71	827	66·93	18·28	269	65·37	24·70
5 do. 10 do.	6·09	23	7·99	2·68	17	9·40	1·56	99	9·29	2·19	30	11·30	2·76
10 do. 15 do.		8		0·93	2		2·67	74		1·64	29		2·66
15 do. 20 do.		10		1·17	14		3·12	135		2·98	40		3·67
20 do. 30 do.	10·37	84	19·07	9·80	24	10·94	5·34	872	15·71	8·22	99	14·95	8·27
30 do. 40 do.	13·08	92	28·65	10·74	33	16·71	7·35	848	18·94	7·69	79	19·42	7·25
40 do. 50 do.	10·24	65	32·61	7·58	25	20·46	5·57	316	22·83	6·98	64	17·82	5·88
0 do. 60 do.	31·45	60	30·95	6·93	48	62·34	10·69	329	29·88	7·27	111	46·56	10·19
60 years and upwards	64·03	58	101·95	7·04	54	126·17	12·03	531	62·39	11·73	154	80·12	14·14
Total ..	23·17	857	45·13	100·	449	39·12	100·	4,525	36·27	100·	1,089	33·10	100·

38. Viramgám heads the list with a death-rate of 45·13 per 1,000. In this town, during the year, there were no deaths reported either from cholera or small-pox, so that this excessive death-rate cannot be ascribed to epidemic causes. It will be observed that the death-rate from fevers alone amounted to 30·70 per 1,000, whilst from bowel-complaints it reached the very high rate of 12·80 per 1,000.

Death-rate in Viramgám.

On turning to the second table, it will be seen that whereas for the whole Presidency the death-rate for children under 1 year of age amounts to the high rate of 201·58 per 1,000, in Viramgám it reached the excessive rate of 462·30 per mille, so that nearly half the children, who were born, died before they were a year old. The rate throughout the Presidency, for children between 1 and 5, is 45·52, but in Viramgám it was 130·23 per 1,000. I have lately reported on this town, and brought to the notice of Government the many local insanitary conditions which have caused these heavy death-rates. This town is surrounded on nearly 3 sides by water; its drinking water-supply is impure and liable to be polluted by nightsoil. Conservancy is inadequately performed, and the arrangements for the removal of nightsoil are very bad, whilst it has insufficient latrine accommodation for the wants of the people. In short, it may be said truly that the people are simply killed wholesale by living over a damp and impure sub-soil, and by breathing an atmosphere and by drinking water which are polluted with their own excrement.

Due to insanitary conditions which prevail.

39. In Jambusar the death-rate amounted to 39·12 per 1,000; this high death-rate is principally ascribed to deaths from bowel-complaints, the death-rate having reached the excessive figure of 21·95 per 1,000. Deaths among children under 1 year of age amounted to the appalling rate of 617·78 per 1,000, and between 1 and 5 they were more than double the Presidency rate.

Death-rate in Jambusar.

40. In the above table I have, acting under the orders contained in Government Resolution, General Department, No. 193, dated 22nd January 1878, giving cover to despatch from Her Majesty's Secretary of State for India No. 162, dated 31st October 1877, given opposite to the City of Ahmedabad the figures enumerated at the census

Death-rate in Ahmedabad.

of 1881; but Ráo Bahádur Ranchorelál Chotalál, C.I.E., President of the Municipality, has been good enough to furnish me with the details of population, which are, he thinks, more correct than those stated in the census returns, and which are as follows :—

Population within the city walls ...	... ...	115,474
Do. of Suraspur ...	... ...	5,484
Do. of railway suburb	... ...	1,248
Do. of other suburbs added since 1882-83	... ...	5,004
	Total ...	127,210

The subjoined statement shows the deaths according to the population as given by the census, as contrasted with these figures :—

	Death-rate per 1,000 of Population.	
	According to Census of 1881.	According to Municipal Census.
Cholera	0·05	0·05
Small-pox	.....	.....
Fevers	25·37	24·88
Bowel-complaints	0·50	0·48
Injuries	0·11	0·11
Other causes	10·24	10·05
Total ...	36·27	35·57

In each column the still-born deaths, (which through an error of the Municipal Secretary, and in direct contravention of orders, have, up to this time, been included among the deaths), have been excluded. The death-rate among infants under 1 year of age amounted to 397·77 per 1,000, and among children between 1 and 5 years of age to 65·93 per 1,000. The death-rate from fevers was 25·37 per 1,000.

Death-rates in Ahmedabad for 1886 compared with 1885 and previous years.

41. There has been a great improvement in the death-rate, as there were 1,958 fewer deaths recorded in 1886 than in the previous year. Ráo Bahádur Ranchorelál Chotálal, C.I.E., whose great services to the City have recently been acknowledged by Government, says in his memorandum dated 24th January 1887 :—

"The death-rates at different periods have been as follows :—

For the year 1886	37·52	per 1,000 of population.	
Do. 1885	52·89	do.	do.
Average of 5 years, 1881—1885 ...	47·06	do.	do.
Do. 10 years, 1876—1885 ...	54·83	do	do.

"The reduction of death-rate in 1886, though satisfactory, is not as good as we should eventually expect."

It afforded me much gratification to be able to report to Government the advance which has been made in the sanitary administration of the City since I reported on it in 1876, which is largely due, in my opinion, to the measures introduced by Mr. Ranchorelál. Among other matters, Ahmedabad has certainly taken the lead of all the municipalities in Western India, including Bombay, in having provided a tramway, by which all the nightsoil collected in the City is removed to a distance of 3 miles from it. The year 1886 was an exceptionally healthy year all over the Presidency, but I have no doubt the improvements noticed in Mr. Ranchorelál's memorandum have contributed towards producing the lower death-rate.

Death-rate in Ahmednagar.

42. In Ahmednagar the registration is evidently inaccurate, as more than half the deaths are registered under the heading of other causes—the total death-rate being 33·10 per 1,000. Infants under 1 year of age died at the rate of 252·00 per 1,000, and between 1 and 5, 65·37 per 1,000.

Comparison of Presidency death-rates at different ages with England.

43. I have thought it might be useful to compare the death-rates at different ages in this Presidency with the death-rates in England, and to compare the death-rates at different ages in London during 1881 with those in the above 4 towns in our Presidency in 1886. The following table will show how very much higher, at all ages, the death-rate in this Presidency is; and whereas, in England, infants under 1 year of age died at the rate of

152·7 per 1,000 living, in the Presidency, during 1886, 201·58 per 1,000 infants died. The total deaths under 5 years of age in England were 52·3 per 1,000, and in the Bombay Presidency 78·40 per 1,000.

England.				Bombay Presidency.			
Age Periods.	Population, 1881.	Deaths.		Age Periods.	Population, 1881.	Deaths.	
		Number.	Ratio per 1,000 Living.			Number.	Ratio per 1,000 Living.
All ages	25,974,439	491,035	18·9	All ages	16,454,414	381,185	23·17
Under 1	753,113	114,976	152·7	Under 1	457,644	92,251	201·58
1 and under 2	684,412	35,034	51·2	1 and under 5	1,714,283	78,028	45·52
2 do. 3	704,409	15,682	22·3				
3 do. 4	691,695	10,577	15·3				
4 do. 5	687,235	7,914	11·5				
Total under 5 ..	3,520,864	184,182	52·3	Total under 5 ..	2,171,927	170,279	78·40
5 and under 10	3,147,396	18,084	5·8	5 and under 10	2,337,644	15,746	6·47
10 do. 15	2,809,331	9,102	3·3	10 do. 15	1,877,474	9,518	5·07
15 do. 20	2,547,212	11,806	4·7	15 do. 20	1,237,860	11,896	9·24
20 do. 25	2,328,226	14,103	6·1	20 do. 30	2,984,580	32,428	10·87
25 do. 35	3,793,461	30,681	8·0	30 do. 40	2,480,436	32,163	13·08
35 do. 45	2,940,753	35,222	11·9	40 do. 50	1,543,253	29,793	19·24
45 do. 55	2,173,446	37,067	16·2	50 do. 60	1,000,059	31,456	31·45
55 do. 65	1,534,086	47,337	30·3	60 and upwards	742,591	47,994	64·63
65 do. 75	852,424	53,607	61·1				
75 do. 85	295,072	40,214	128·9				
85 and upwards	38,148	10,530	243·3				

44. The next table shows the death-rates at different ages in London as compared with the 4 towns in the Presidency, and this shows most forcibly the appalling death-rate which obtains in some of our towns. For example, whereas, in London, infants under 1 year of age died at the rate of 175·4 per 1,000 living, in Viramgám 462·30 infants, in Jambusar 617·78, in Ahmedabad 397·77, and in Ahmednagar 252 infants died to every 1,000 living.

Death-rates by ages of 4 towns compared with London.

Age Periods.	Deaths per 1,000 living in London.	Deaths per 1,000 living in Viramgám.	Deaths per 1,000 living in Jambusar.	Deaths per 1,000 living in Ahmedabad.	Deaths per 1,000 living in Ahmednagar.
Under 1 year	175·4	462·30	617·78	397·77	252·00
1 and under 5 years ...	35·7	130·23	91·00	65·93	65·37
Total under 5 years ...	67·0	205·49	186·05	142·40	98·40
5 and under 20 years ...	5·2	7·99	9·40	9·29	11·30
Total under 20 years ...	23·8	67·68	55·71	55·40	42·95
20 and under 40 years ...	8·9	23·11	13·67	16·75	15·17
40 and under 60 ...	20·7	34·33	34·35	25·98	29·29
60 and under 80 ...	62·0	101·95	126·17	62·89	80·12
80 and upwards	204·3				
Total .	21·2	45·13	39·12	36·27	33·10

These facts prove, more conclusively than any words can, the necessity for active measures being taken to improve the sanitary condition of the respective towns. The time for discussion, as to what is to be done, has, I submit, gone by; but earnest and comprehensive measures should be taken to prevent this wholesale massacre of the infant population in these towns.

45. I have continued the tables, (which I commenced in my Annual Report for 1883), showing the number of births and deaths by causes and their ratios per 1,000 of population in each táluka and town in each Collectorate, and comparing the zilla rate with the results of the preceding year and the mean of the previous 10 years, as they are extremely valuable in localizing disease to the smallest unit possible under

Births and deaths by causes and their ratios per 1,000 of population in each táluka and town in each Collectorate.

our present system of registration; but as time goes on, and as the registration becomes more perfect, it will, in my opinion, be desirable to sub-divide the tálukás into still smaller units, and to show the villages by groups of population. It would, I think, be possible to have at least 3 such groups, *viz.* :—

Villages containing a population above 3,000 inhabitants.
Do. do. between 500 and 3,000 inhabitants.
Do. do. below 500 inhabitants.

It would then be possible to see in which groups registration was most defective and in which disease had most prevailed.

WESTERN REGISTRATION DISTRICT.

Collectorates.

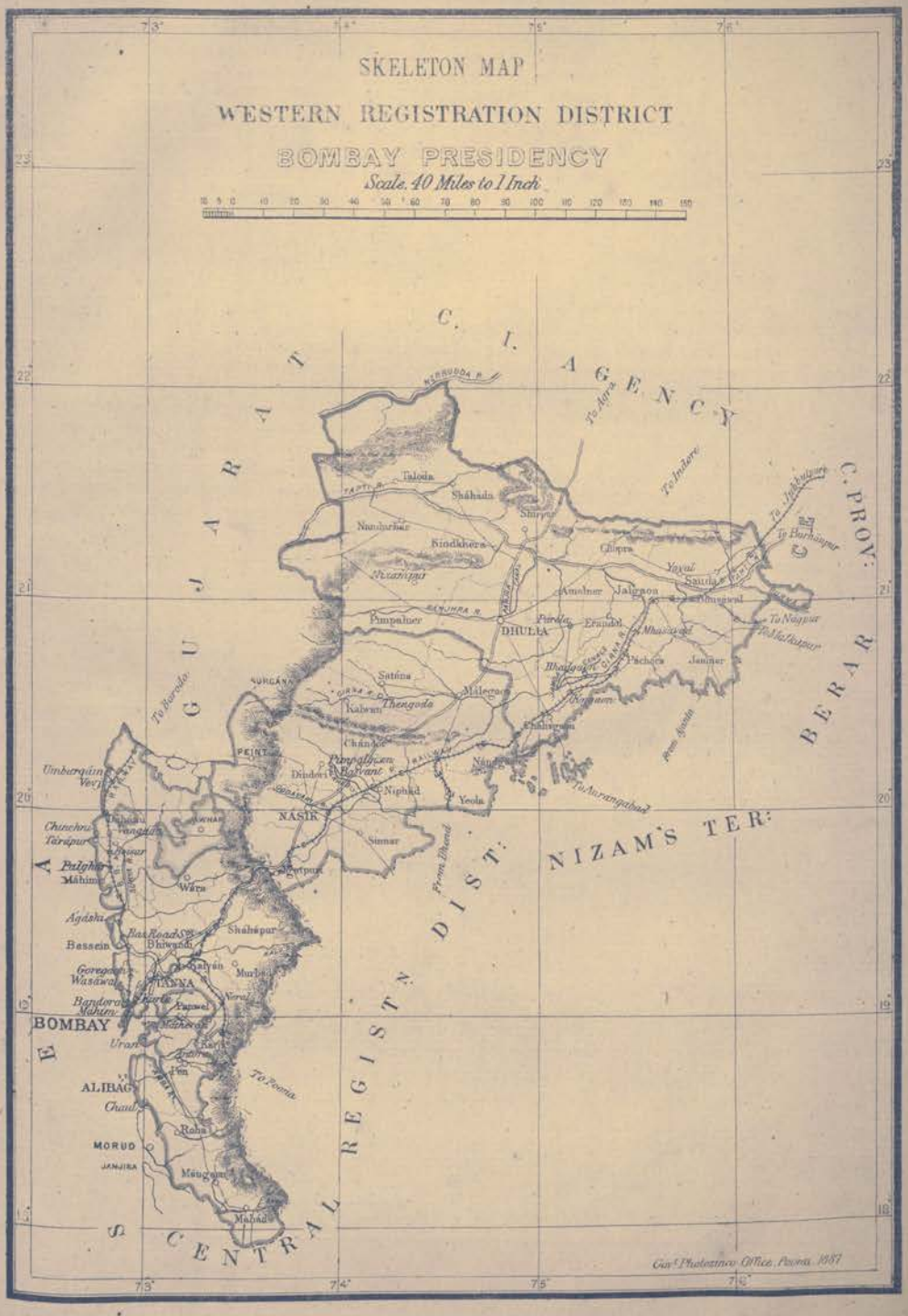
1. Khándesh.
2. Násik.
3. Thána.
4. City of Bombay.
5. Kolába.

Khándesh.

46. In the Khándesh Collectorate during 1886 there were only 21 deaths from cholera reported, out of which 18 occurred in the táluka of Bhusával and its petha Edalabad, in which the disease appeared in July and ceased in August, and 3 deaths were registered in Chopda Táluka in the month of September. The general death-rate for the Collectorate was 0·02 per 1,000 against 1·54 in 1885. Small-pox prevailed, more or less, in each táluka of the Collectorate, except Chálisgaon, Chopda, Bhusával and its petha Edalabad, and Jámner. Amongst the town circles there was only 1 death recorded in the town of Nandurbár. The general death-rate from small-pox for the Collectorate was 0·22 per 1,000 against 0·04 in 1885, but the death-rate (0·91 per 1,000) in the táluka of Sindkheda was very high. The death-rates in the tálukás of Sháháda and Dhulia (0·84 and 0·79 per 1,000 respectively) were also high. The general death-rate from fevers for the Collectorate was 22·90 per 1,000 against 22·08 in 1885, but a high death-rate took place in the táluka of Jámner and Sávda and its pethás Yával and Ráver :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population for 1886.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Khándesh.	Dhulia Rural Circle.	59,688	757·16	78·83	152	3,048	51·07	52·27	...	...	47	0·79	1,417	23·74	302	5·06	12	0·20	64	1·07	1,842	30·86	30·35
	Amalner do. ...	88,980	537·	168·85	225	3,900	43·89	43·31	...	...	49	0·55	2,101	23·61	327	3·67	26	0·29	29	0·33	2,532	28·45	31·20
	Parola Petha do. ...																						
	Erandol do. ...	96,872	460·	197·55	198	3,677	40·46	42·53	...	...	6	0·07	2,082	22·90	496	5·45	28	0·31	111	1·22	2,722	29·93	29·29
	Pachora do. ...																						
	Bhadgaon Petha do. ...	100,051	535·	187·01	187	3,625	36·23	35·39	...	...	3	0·03	2,473	24·72	234	2·34	29	0·29	57	0·57	2,796	27·95	31·03
	Chálisgaon do. ...	59,031	504·	117·13	132	2,576	43·64	42·98	...	...	...	...	1,472	24·94	132	2·23	10	0·17	62	0·88	1,666	28·22	37·90
	Pimpalner do. ...	87,549	1,339·	65·38	236	2,449	27·97	34·27	...	...	15	0·17	1,439	16·44	250	2·86	9	0·10	9	0·10	1,722	19·67	22·55
	Nizámpur Petha do. ...																						
	Nandurbár do. ...	56,025	673·54	83·18	195	2,111	37·68	38·08	...	...	5	0·09	1,039	18·54	79	1·41	15	0·27	6	0·11	1,144	20·42	25·63
	Sháháda do. ...	64,368	479·	134·38	151	1,950	30·39	31·15	...	...	54	0·84	1,117	17·35	301	4·68	5	0·08	72	1·12	1,549	24·07	29·19
	Taloda do. ...	49,788	1,177·	42·30	258	908	18·24	27·48	...	...	7	0·14	550	11·05	99	1·99	8	0·16	6	0·12	676	13·46	17·35
	Sindkheda do. ...	61,461	504·	121·95	140	2,699	43·91	49·10	...	...	56	0·91	1,489	24·08	347	5·05	6	0·10	33	0·53	1,922	31·27	39·34
	Shirpur do. ...	43,321	651·	66·55	99	1,667	38·48	43·05	...	...	2	0·05	883	20·38	238	5·49	9	0·21	5	0·11	1,137	26·24	28·73
	Chopda do. ...	45,903	367·52	124·90	91	1,717	37·40	43·31	3	0·07	...	...	1,177	25·64	259	5·64	7	0·15	1	0·02	1,447	31·52	31·78
	Sávda do. ...																						
	Yával Petha do. ...	141,745	553·	256·32	182	5,001	35·28	39·91	...	...	19	0·13	3,912	27·60	776	5·47	36	0·25	124	0·88	4,867	34·33	30·06
	Ráver Petha do. ...																						
	Bhusával do. ...	96,160	571·	168·41	183	3,219	33·48	37·54	18	0·19	...	...	2,455	25·53	648	6·74	30	0·31	56	0·58	3,207	33·35	27·43
	Edalabad Petha do. ...																						
	Jalgaon do. ...	59,288	317·83	186·52	87	2,343	39·52	40·30	...	...	13	0·22	1,495	25·22	355	5·99	12	0·20	56	0·94	1,931	32·57	28·51
	Jámner do. ...	83,535	525·	159·11	158	2,781	33·28	36·46	...	...	...	...	2,479	29·68	352	4·21	16	0·19	117	1·40	2,964	35·48	31·79
	Dhulia Town Circle...	18,449	1·84	10,026·63	1	504	27·32	25·20	...	...	...	...	183	9·92	77	4·18	1	0·05	32	1·73	293	15·88	23·63
	Nandurbár do. ...	6,841	0·46	14,871·74	1	109	15·93	18·13	...	...	1	0·14	131	19·15	25	3·65	3	0·45	...	...	160	23·39	40·63
	Chopda do. ...	13,692	0·48	29,025·	1	385	20·46	28·27	...	...	...	...	386	28·74	3	0·22	6	0·43	...	...	398	21·39	22·61
	Nasirabad do. ...	10,243	0·17	60,252·94	1	230	22·45	23·72	...	...	...	...	157	15·33	...	...	2	0·19	...	...	159	15·52	14·25
	1886 ...	1,237,231	9,914	124·42	2,683	44,811	36·22	...	21	0·02	277	0·22	28,330	22·90	5,300	4·28	270	0·22	830	0·67	35,028	28·31	...
	1885 ...					48,595	39·28	...	1,900	1·54	48	0·04	27,315	22·08	5,716	4·61	243	0·19	1,128	0·91	36,389	29·37	...
	Mean for 10 years, 1876 to 1885 ...					33,083	30·00	...	2,407	2·12	1,019	0·90	20,793	18·35	4,163	3·68	288	0·25	878	0·77	29,543	26·07	

N. B.—The births and deaths for pethás are included in those for their respective tálukás, as the population of them is not shown separately in the Census Report.


SKELETON MAP
WESTERN REGISTRATION DISTRICT
BOMBAY PRESIDENCY
Scale. 40 Miles to 1 Inch
C. I. AGENCY
C. PROV:
BERAR
NIZAM'S TER:
GUJARAT
CENTRAL REGISTN DIST:
BOMBAY
ALIBAG
MORUD
JANJIRA
DHULIA
NASIK
TANNA
Taloda
Shahada
Nandurbar
Kindkhera
Chopra
Yaval
Sauda
Amalner
Jalgaon
Pimpalner
Erandol
Pachora
Jamner
Satana
Malegaon
Kalwan
Thengoda
Chandor
Dindori
Niphad
Yeola
Sinnar
Wara
Shahapur
Bhiwandi
Kalyan
Murbad
Panwel
Roha
Mangaon
Mahad
Umbarqam
Vevi
Chinchni
Tarapur
Palghar
Mahim
Agashi
Bassein
Goregaon
Wasawal
Bandora
Mahim
Uran
Pen
Chaul
To Agra
To Indore
To Jubbulpore
To Burhanpur
To Nagpur
To Mahkapur
To Aurangabad
From Ajanta
From Dhond
To Poona
To Borodo
Gov^t Photozinco Office, Poona 1887

47. In the Násik Collectorate, cholera was present at the close of 1885. In 1886 it caused 2 deaths in January in the town of Násik, and then ceased. Small-pox prevailed to a slight extent, and caused only 9 deaths, or 0·01 per 1,000, against 81 or 0·10 in 1885. The mean death-rate for the last 10 years was 0·75. The general death-rate from fevers for the Collectorate was 17·97 per 1,000 of population against 25·83 in 1885; but a high deathrate took place in the tálukás of Nándgaon and Málegaon, in which it was 28·68 and 23·07 per 1,000 respectively. From bowel-complaints the death-rate for the Collectorote was 2·39 per 1,000 against 4·31 in 1885, but in the Báglán Táluka it was 4·30 per 1,000.

Násik.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Násik	Násik Rural Circle	67,910	464·44	146·22	135	2,111	31·09	35·43	..	..	..	..	884	13·02	99	1·46	8	0·12	177	2·60	1,168	17·20	41·34
	Sinnar do.	66,081	519·	127·32	99	2,726	41·25	44·29	..	..	1	0·01	1,130	17·10	193	2·92	7	0·11	246	3·72	1,577	23·86	43·49
	Igatpuri do.	58,749	376·	182·84	128	2,098	30·52	30·95	..	..	..	..	878	12·77	67	0·97	18	0·26	120	1·75	1,082	15·75	27·40
	Dindori do.	72,290	529·	136·54	128	2,830	39·27	41·75	..	..	..	..	1,166	16·13	242	3·35	13	0·18	235	3·25	1,656	22·91	42·07
	Niphád do.	87,523	411·	212·95	121	2,972	33·94	36·54	..	..	1	0·01	1,331	15·21	262	2·99	9	0·10	178	2·03	1,781	20·35	44·72
	Chándor do.	50,809	385·	132·21	108	1,789	35·15	40·02	..	..	2	0·04	996	19·57	127	2·49	7	0·14	87	1·71	1,219	23·95	37·68
	Yeola do.	35,597	411·73	86·45	117	1,183	33·23	37·92	..	..	..	..	647	18·18	69	1·94	6	0·17	41	1·15	763	21·44	46·02
	Nándgaon do.	36,399	437·	69·56	88	1,395	45·89	49·54	..	..	—	..	872	28·68	66	2·17	1	0·03	22	0·72	961	31·61	45·53
	Málegaon do.	74,718	775·	96·41	144	3,045	40·76	43·27	..	..	2	0·03	1,724	23·07	157	2·10	10	0·13	37	0·50	1,930	25·83	33·22
	Báglán do.	64,875	619·	104·81	155	2,683	41·36	43·70	..	..	1	0·02	1,362	20·99	279	4·30	12	0·18	27	0·42	1,681	25·91	34·19
	Kalvan do.	58,486	554·	105·57	187	2,062	35·26	40·27	..	..	2	0·03	1,099	18·79	160	2·74	13	0·22	70	1·20	1,344	22·98	33·43
	Peint do.	55,144	458·	120,40	221	2,179	39·51	34·13	..	..	—	..	1,237	22·43	9	0·16	17	0·31	1	0·02	1,264	22·92	18·60
	Násik Town Circle	24,101	0·56	43,037·50	1	471	19·54	15·29	2	0·08	—	..	324	13·44	80	3·32	6	0·25	176	7·30	588	24·39	50·02
	Yeola do.	17,685	0·22	80,386·36	1	425	24·03	28·50	..	..	..	..	316	17·87	49	2·77	5	0·28	145	8·20	515	29·12	41·96
	Deviáli Cantonment	1,086	..	..	..	22	20·26	36·83	..	..	..	..	11	10·13	..	..	1	0·92	13	11·97	25	23·02	47·88
	Málegaon do.	3,730	..	..	..	147	38·89	37·57	..	..	..	..	65	17·20	5	1·32	2	0·53	47	12·43	119	31·48	52·38
	Europeans and Eurasians and fighting men in the cantonment of Deviáli.	1,883																					
	1886 ..	781,206	5,940·	131·51	1,633	28,147	36·03	..	2	..	9	0·01	14,042	17·97	1,864	2·39	135	0·17	1,622	2·08	17,674	22·62	..
	1885 ..					20,947	38·33	..	2737	3·50	81	0·10	20,178	25·83	3,364	4·31	168	0·20	2,763	3·54	29,281	37·47	..
	Mean for 10 years, 1876—1885 ..					22,678	30·30	..	1212	1·62	561	0·75	15,407	20·59	1,915	2·56	161	0·21	2,056	2·75	21,312	28·48	..

N.B.—The area, in square miles, of the cantonment of Deviáli and Málegaon are included in the towns of Násik and Málegaon respectively, as they are not separately shown in the Census Report.

48. In the Thána Collectorate cholera made its appearance in January in the Karjat Táluka, and caused 7 deaths. One death was registered in October in the táluka of Bassein; it then ceased. Small-pox prevailed to a slight extent in the tálukás of Murbád, Kályán, Sálsette, and Karjat, and caused only 13 deaths, or 0·02 per 1,000, against 101, or 0·13 in 1885. The mean death-rate for the previous 10 years was 0·56. The general death-rate from fevers for the Collectorate was 18·26 per 1,000 against 20·00; but high death-rates (24·39 and 23·09 per 1,000) took place in the tálukás of Váda and Murbád. The death-rates (21·65 and 21·37 per 1,000) in the Bhiwandi and Sháhápur Tálukas respectively were also high. From bowel-complaints the death-rate for the Collectorate was 0·52 per 1,000, but in the Sálsette Táluka it was 1·79 per 1,000.

Thána.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1885.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Thána.	Dáhánu Rural Circle	109,322	643·	170·02	209	3,472	31·76	29·23	..	..	..	..	1,539	14·08	42	0·38	88	0·80	152	1·39	1,811	16·65	18·19
	Máhím do. ..	77,360	419·	184·63	186	2,018	26·09	26·15	..	..	..	..	1,136	14·68	12	0·15	48	0·62	93	1·21	1,289	16·66	18·61
	Váda do. ..	36,493	310·	117·72	153	1,211	33·18	31·18	..	..	..	..	890	24·39	7	0·19	26	0·71	33	0·90	956	26·19	32·94
	Sháhápur do, ..	107,729	870·	123·83	273	3,172	29·44	31·14	..	..	..	..	2,302	21·37	12	0·11	43	0·40	63	0·58	2,420	22·46	25·53
	Murbád do. ..	63,934	361·	182·15	171	1,942	30·38	30·26	..	..	1	0·01	1,476	23·09	23	0·36	46	0·72	103	1·61	1,649	25·79	23·39
	Kalyán do. ..	65,078	275·50	236·22	229	2,024	31·10	29·21	..	..	2	0·03	1,331	20·45	31	0·48	29	0·45	103	1.58	1,496	22·99	20·55
	Bhiwndi do. ..	75,703	250·	301·45	194	2,183	28·29	29·96	..	..	..	..	1,632	21·65	65	0·86	33	0·44	119	1·58	1,849	24·53	37·63
	Bassein do. ..	68,967	221·	312·07	92	1,718	21·91	22·97	1	0·01	..	..	1,150	16·68	15	0·22	34	0·49	119	1·73	1,319	19·13	21·03
	Sálsette do. ..	93,693	234·02	400·38	112	2,105	22·47	24·42	..	..	2	0·02	1,451	15·81	168	1·79	51	0·54	224	2·39	1,926	20·55	26·07
	Karjat do. ..	82,062	353·	232·47	268	2,549	31·06	30·05	7	0·09	8	0·10	1,534	18·69	82	0·39	43	0·52	165	2·01	1,789	21·80	28·79
	Thána Town Circle.	14,456	6·98	2,071·66	1	88	6·09	11·42	..	..	..	..	167	11·55	8	0·55	1	0·07	29	2·01	205	14·18	32·19
	Kalyán do. ..	12,910	2·50	5,164	1	173	13·40	15·41	..	..	..	..	107	8·29	4	0·31	6	0·46	39	3·02	156	12·08	31·06
	1885 ..	807,367	3,936·	205·12	1,882	22,657	28·06	..	8	0·01	13	0·02	14,745	18·26	419	0·52	448	0·55	1,242	1·54	16,875	20·90	
	1885 ..					22,559	27·94	..	2,589	3·21	101	0·13	16,150	20·00	548	0·68	377	0·47	1,971	2·44	21,785	26·97	
	Mean for 10 years, 1876–1885 ..					20,159	25·78	..	1,150	1·47	439	0·56	14,108	18·04	288	0·37	388	0·50	1,760	2·25	18,133	23·19	..

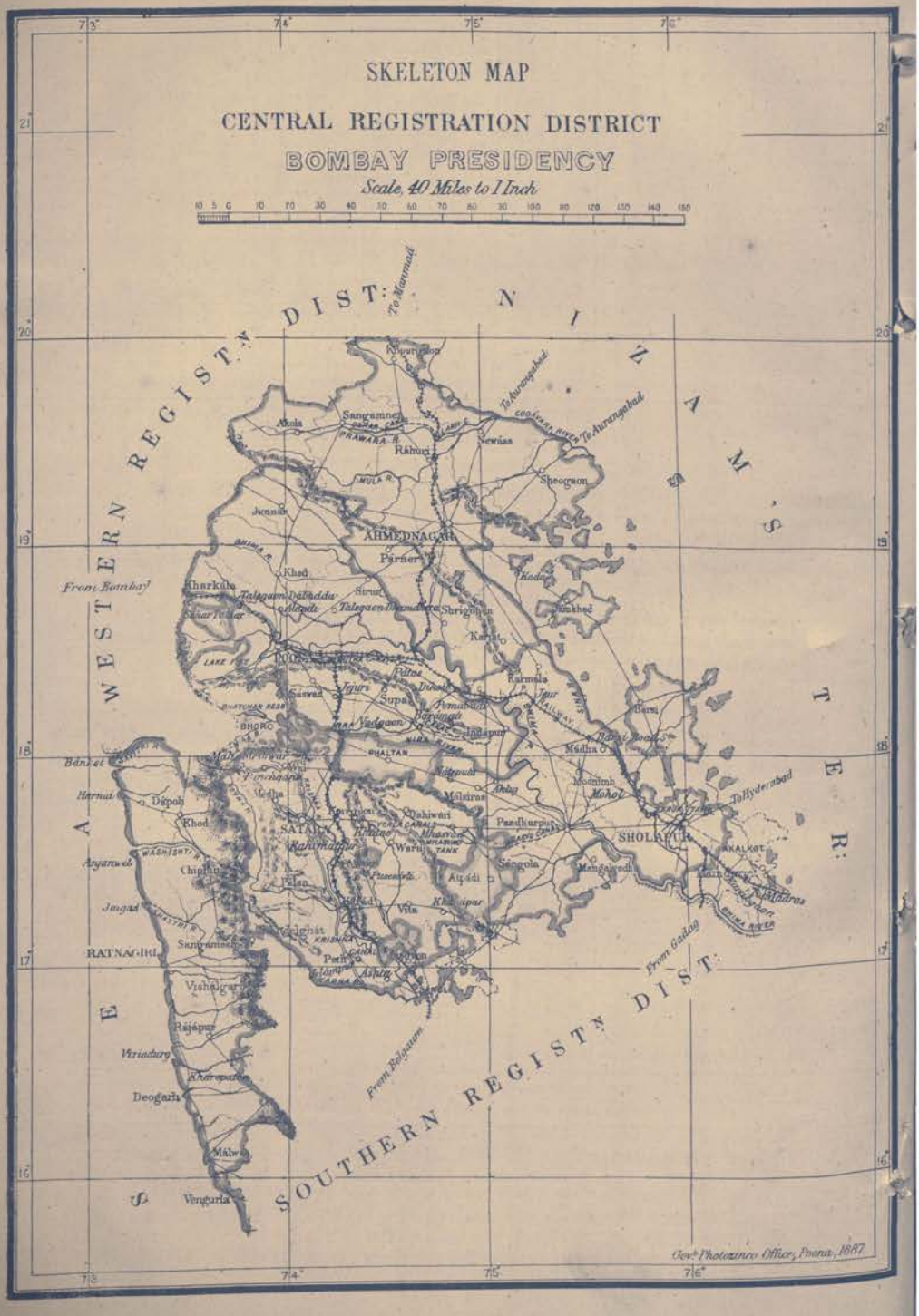
49. In the City of Bombay there were 17 deaths, or ·02 per 1,000, from cholera, against 581, or 0·75 in 1885. Small-pox prevailed to a slight extent from January to September, but caused only 18 deaths, or 0·02 per 1,000, against 61, or 0·08 in 1885. The mean death-rate for the previous 10 years was 0·97. The death-rate from fevers was 7·56 per 1,000 against 8·38 in 1885, and the death-rate from all causes was 25·62 per 1,000 against 27·89 in 1885 and a decennial mean of 32·80 :—

City of Bombay.

Years.	Population according to Census of 1881.	Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.
1885	773,196.	17	0·02	18	0·02	5,843	7·56	1,465	1·89	372	0·48	12,607	15·65	19,812	25·62
1885		581	0·75	61	0·08	6,479	8·38	1,520	1·97	365	0·39	12,615	16·32	21,561	27·89
Mean for 10 years 1876-1885.		729	1·03	687	0·97	7,528	10·62	2,123	2·99	332	0·47	11,853	16·72	23,252	32·80

50. In the Kolába Collectorate cholera was present at the close of 1885, and caused 4 deaths in January in Nágothna Petha. An outbreak took place in the Alibág Táluka in September, which lasted until the following month, and ceased after causing 37 deaths. The general death-rate from cholera for the Collectorate was 0·08 per 1,000, against 2·02 in 1885. Small-pox prevailed to a slight extent in all the rural registration circles, but no deaths from the disease were registered in the town circles. The death-rate for the Collectorate was 0·07 per 1,000 against 0·39 in 1885; but a high death-rate took place in the tálukás of Mahád and Mángaon, in which the recorded death-rates were, respectively, 0·16 and 0·14 per 1,000. The general death-rate from fevers for the Collectorate was 16·30 per 1,000 against 15·10 in 1885 and a decennial mean of 14·51, but the death-rate (19·76 per 1,000) in the táluka of Pen and its petha Nágothna was very high.

Kolába.


SKELETON MAP
CENTRAL REGISTRATION DISTRICT
BOMBAY PRESIDENCY
Scale, 40 Miles to 1 Inch
WESTERN REGISTN DIST:
NIZAM'S TER:
SOUTHERN REGISTN DIST:
SEA
To Mannad
To Aurangabad
From Bombay
From Gadag
From Belgaum
To Hyderabad
AHMEDNAGAR
SATAR
SHOLAPUR
RATNAGIRI
Sangamner
Akola
Rahuri
Newass
Sheogaon
Junnar
Parner
Khed
Kharkala
Sirur
Shrigonda
Karjat
Karmala
Jejuri
Supa
Pomabadi
Indapur
Madha
Mohol
Barsi
Bhor
Phaltan
Malsiras
Dahiwari
Pandharpur
Sangola
Mangalvedh
Atpadi
Vita
Khanapur
Peth
Ashta
Chiplun
Dapoli
Khed
Harnai
Anjanwel
Jaigad
Sangameshwar
Vishalgarh
Rajapur
Viriadurg
Deogarh
Malwan
Vengurla
Gov. Photozinco Office, Poona, 1887

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Kolaba.	Panvel Rural Circle.	90,830	304	298·78	218	3,015	33·19	33·90	..	..	4	0·04	1,695	18·66	43	0·47	27	0·30	154	1·70	1,929	21·17	27·95
	Alibág do. ..	69,762	103·40	350·61	171	2,218	31·79	33·01	37	0·53	1	0·01	1,242	17·80	67	0·96	29	0·42	302	4·33	1,678	24·05	25·31
	Pen do. .. / Nágothna Petha R. Circle.	70,200	298	235·57	199	2,278	32·45	33·02	4	0·06	1	0·01	1,338	19·76	12	0·17	16	0·23	129	1·84	1,550	22·08	22·83
	Roha do. ..	44,835	200	224·18	133	1,468	32·74	34·50	..	..	1	0·02	833	18·58	73	1·63	15	0·33	169	3·77	1,091	24·33	23·62
	Mángaon do. ..	81,085	353	229·70	225	2,203	27·17	25·78	..	..	11	0·14	1,145	14·12	85	1·05	25	0·32	235	2·91	1,503	18·54	23·32
	Mahád do. ..	102,457	458·57	223·71	245	2,842	27·70	16·23	..	..	16	0·16	1,321	12·88	43	0·42	34	0·33	253	2·47	1,637	15·96	11·85
	Panvel Town Circle.	10,351	3	3,450·33	1	269	25·99	13·91	..	..	..	..	77	7·44	10	0·97	5	0·48	26	2·51	118	11·40	11·49
	Alibág do. ..	6,876	0·60	10,626·67	1	136	21·35	28·39	..	..	..	..	78	12·23	8	1·25	3	0·47	46	7·21	135	21·17	23·99
	Mahád do. ..	6,804	0·43	15,823·26	1	122	17·93	23·37	..	..	..	..	92	13·52	22	3·23	5	0·73	22	3·23	141	20·72	18·52
	1886 ..	482,830	1,211	266·61	1,194	14,551	30·14	..	41	0·08	34	0·07	7,871	16·30	363	0·75	160	0·33	1,307	2·71	9,776	20·24	..
	1885 ..					13,483	27·92	..	975	2·02	188	0·39	7,292	15·10	333	0·69	163	0·34	1,521	3·15	10,472	21·69	..
	Mean for 10 years, 1876—1885 ..					10,692	32·14	..	696	1·51	220	0·48	6,704	14·51	223	0·49	165	0·36	1,472	3·18	9,485	20·53	..

N. B.—The births and deaths in Nágothna Petha are included in the Pen Táluka, as in the Census Report the population living in each is not shown separately.

CENTRAL REGISTRATION DISTRICT.

Collectorates.

1. Ahmednagar.
2. Poona.
3. Sholápur.
4. Sátára.
5. Ratnágiri.

Ahmednagar.

51. In the Ahmednagar Collectorate during 1886 no deaths were recorded from cholera or small-pox, against 1·51 per 1,000 from cholera and 0·05 from small-pox in 1885. The general death-rate from fevers for the Collectorate was 20·11 per 1,000, but it was high in the Jámkhed and Nagar Tálukás. In the former the recorded death-rate was 26·43 per 1,000 and in the latter 23·15.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Ahmednagar.	Nagar Rural Circle .	71,458	618·50	115·53	108	3,012	42·15	43·37	..	..	..	..	1,654	23·15	239	3·34	11	0·15	216	3·02	2,120	29·66	23·53
	Akola do. ..	60,800	588·	103·40	156	2,035	33·47	41·00	..	..	..	..	1,035	17·02	74	1·22	7	0·12	168	2·76	1,284	21·12	30·41
	Jámkhed do. ..	60,960	482·	126·47	75	3,208	52·62	50·03	..	..	..	..	1,611	26·43	216	3·54	5	0·08	57	0·93	1,889	30·98	40·67
	Párner do. ..	73,701	779·	94·61	122	2,821	38·28	40·36	..	..	..	..	1,293	17·61	122	1·66	3	0·04	200	2·71	1,623	22·02	32·60
	Shrigonda do. ..	51,291	625·	82·03	84	1,691	38·22	39·21	..	..	..	..	923	17·99	72	1·40	5	0·10	115	2·24	1,115	21·73	30·36
	Karjat do. ..	34,820	580·	60·03	79	1,944	55·83	50·34	..	..	..	..	777	22·31	97	2·79	6	0·17	85	2·44	965	27·71	40·12
	Nevása do. ..	78,158	607·	128·76	145	3,302	42·25	43·14	..	..	..	..	1,540	19·70	205	2·62	3	0·04	374	4·78	2,122	27·14	34·86
	Kopargaon do. ..	63,789	511·	124·83	121	2,690	42·11	42·92	..	..	..	..	1,374	21·54	156	2·44	7	0·11	137	2·15	1,674	26·24	37·23
	Sangamner do. ..	59,561	707·41	84·20	151	3,117	52·33	51·33	..	..	..	..	1,191	20·00	135	2·27	14	0·24	445	7·47	1,785	29·97	38·60
	Ráhuri do. ..	63,289	497·	127·31	111	2,578	40·73	42·62	..	..	..	..	1,386	21·90	102	1·61	5	0·08	129	2·04	1,622	25·63	30·41
	Shevgaon do. ..	37,113	670·	130·92	180	3,854	44·24	41·67	..	..	..	..	1,798	20·64	308	3·54	7	0·08	221	2·57	2,337	26·83	34·95
	Ahmednagar Town Circle.	32,903	0·50	65,806.	1	1,073	32·61	23·37	..	..	..	..	335	10·18	123	3·74	18	0·55	613	18·63	1,089	33·10	31·33
	Sangamner do. ..	8,796	0·59	14,938·47	1	484	55·02	49·23	..	..	..	..	139	15·80	21	2·39	5	0·57	120	13·64	285	32·40	47·06
	Ahmednagar Cantonment.	4,589	..	....	..	83	18·09	16·56	..	..	..	..	46	10·02	3	0·65	..	..	32	6·97	81	17·65	20·05
	1886 ..	751,228	6,666	112·69	1,384	32,138	42·85	..	..	..	..	..	15,107	20·11	1,873	2·49	96	0·13	2,915	3·88	19,991	26·6	..
	1885 ..					42,444	43·19	..	1,132	1·51	33	0·05	18,304	24·36	2,469	3·28	119	0·16	3,576	4·76	25,633	34·12	..
	Mean for 10 years, 1876—1885 ..					23,767	31·17	..	1,769	2·32	279	0·37	14,867	19·50	2,107	2·65	173	0·23	2,878	3·76	21,983	28·83	..

N. B.—The area in square miles for the cantonment of Ahmednagar is included in the town of Ahmednagar, as it is not separately shown in the Census Report.

Poona.

52. In the Poona Collectorate cholera was present at the close of 1885, and continued in January 1886, when 50 deaths were registered, 40 of which, or 0·27 per 1,000, took place in Haveli Táluka. There were 5 deaths, or 0·04, in the Khed Táluka and only 1 in the táluka of Junnar. Amongst the town circles only 4 deaths were recorded in the City of Poona. Small-pox prevailed to a slight extent in the tálukás of Junnar,

Sirur, and Haveli, and in the City of Poona, and caused 14 deaths, or 0·02 per 1,000, against 262, or 0·29, in 1885. The general death-rate from fevers for the Collectorate was 16·40 per 1,000, but in the Indápur and Junnar Tálukás the recorded death-rates (21·55 per 1,000 and 20·30 respectively) were high.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Poona.	JunnarRural Circle.	91,900	610·64	150·50	153	3,809	41·45	45·16	1	0·01	2	0·02	1,866	20·30	134	1·46	33	0·36	210	2·29	2,246	24·44	29·27
	Indápur do.	48,114	567·	86·46	86	2,387	49·61	47·70	..	..	..	..	1,037	21·55	100	2·08	16	0·33	46	0·96	1,199	24·92	36·3[illegible]
	Khed.. do.	141,896	888·	159·79	246	4,813	33·92	38·45	5	0·04	..	..	2,399	16·91	182	1·28	43	0·30	318	2·24	2,947	20·77	37·4
	Sirúr.. do.	73,783	577·	126·16	76	2,397	32·93	33·66	..	..	4	0·05	1,152	15·62	69	0·95	13	0·18	94	1·29	1,332	18·30	28·[illegible]
	Purandhar do.	75,678	479·	161·06	92	3,018	39·88	40·59	..	..	..	..	1,470	19·42	87	1·15	25	0·33	151	2·00	1,733	22·90	30·97
	Bhimthadi do.	110,428	1,067·	106·49	1·0	3,642	32·98	36·45	..	..	..	..	1,758	15·92	159	1·53	25	0·23	125	1·14	2,073	18·52	30·69
	Haveli do.	150,059	799·23	187·78	237	5,400	35·98	36·44	40	0·27	3	0·02	2,798	18·65	317	2·11	64	0·42	395	2·63	3,617	24·10	30·73
	Mával do.	62,383	385·	162·03	164	1,658	26·58	30·06	..	..	..	..	803	12·87	52	0·83	17	0·27	152	2·44	1,024	16·41	21·46
	Poona City T. C.	99,622	5·	19,924·40	1	2,734	27·44	29·36	4	0·04	5	0·05	1,025	10·29	160	1·61	55	0·55	1,313	13·23	2,567	25·77	37·04
	Junnar do.	10,373	0·36	28,813·30	1	447	43·09	46·18	..	..	..	..	90	8·68	38	3·66	3	0·29	174	16·77	305	29·40	37·28
	Poona Cantonment.	25,042	4·65	6,621·70	1	725	28·93	24·96	..	..	..	..	340	13·66	42	1·68	15	0·59	282	11·26	681	27·19	32·48
	Kirkee do.	3,560	4·22	1,718·48	1	135	37·92	25·84	..	..	..	..	32	8·99	4	1·12	9	2·53	81	22·75	125	35·39	26·12
	Europeans, Eurasians and fighting men in the Cantonments of Poona and Kirkee ..	8,779																					
	1886 ..	900,621	5,348·	168·40	1,185	31,135	34·60	..	50	0·05	14	0·02	14,772	16·40	1,354	1·50	318	0·35	3,347	3·72	19,855	22·04	..
	1885 ..					32,914	36·54	..	2,639	2·93	262	0·29	19,869	22·06	2,149	2·39	387	0·43	4,727	5·25	30,033	33·35	..
	Mean for 10 years, 1876—1885 ..					21,554	23·84	..	1,811	2·00	457	0·51	14,934	16·52	1,606	1·78	323	0·36	2,860	3·16	21,991	24·33	..

53. In Sholápur Collectorate, cholera was present at the close of 1885, and in January 1886 it caused 4 deaths in the Bársi Táluka.

Sholápur.

The general death-rate from cholera for the Collectorate was 0·01 per 1,000 against 4·04 in 1885. Small-pox prevailed to a slight extent in the tálukás of Sholápur, Pandharpur, and Sángola, and caused only 6 deaths, or 0·01 per 1,000, against 80, or 0·14 in 1885. The general death-rate from fever for the Collectorate was 19·50 per 1,000 against 25·20 in 1885, but a high death-rate took place in the táluka of Karmála and in the towns of Sholápur and Barsi.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Sholápur.	Sholápur R. C.	89,649	845·67	106·01	146	3,973	44·32	44·73	..	..	3	0·04	1,459	16·27	148	1·83	19	0·21	118	1·32	1,763	19·67	23·02
	Bársi.. do.	94,920	595·62	157·93	122	4,621	49·20	49·61	4	0·04	..	..	1,938	20·35	117	1·24	30	0·32	252	2·69	2,361	25·14	36·09
	Mádha do.	67,961	619·	109·79	89	3,609	53·10	50·10	..	..	..	..	1,289	18·97	248	3·65	19	0·28	99	1·45	1,652	24·31	35·91
	Karmála do.	61,548	706·	80·35	123	3,337	54·22	52·46	..	..	..	..	1,444	23·46	106	1·72	5	0·08	158	2·57	1,713	27·83	43·71
	Pandharpur do.	55,302	469·49	117·79	84	2,551	46·13	47·48	..	..	1	0·02	1,067	19·29	72	1·30	8	0·14	105	1·90	1,253	22·65	41·19
	Sángola do.	62,819	649·	96·84	76	2,933	46·67	48·64	..	..	2	0·03	1,106	17·60	72	1·15	27	0·43	286	4·07	1,463	23·28	36·36
	Málsiras do.	58,332	574·	101·62	69	2,545	43·63	41·59	..	..	..	..	1,028	17·62	47	0·81	4	0·07	67	1·15	1,146	19·65	35·25
	Sholápur T. C.	60,890	1·23	45,030·07	1	1,369	22·86	19·05	..	..	..	..	1,320	22·19	113	1·89	17	0·28	342	5·71	1,801	30·01	33·86
	Bársi.. do.	16,126	0·38	42,436·84	1	318	19·72	22·76	..	..	..	..	359	22·26	22	1·36	7	0·43	114	7·07	502	31·13	47·31
	Pandharpur do.	16,010	0·51	33,150·36	1	713	43·94	45·83	..	..	..	..	319	18·86	136	8·04	9	0·53	73	4·32	537	31·75	38·77
	1886 ..	582,487	4,521·	128·84	712	25,999	44·63	..	4	0·01	6	0·01	11,388	19·50	1,097	1·88	145	0·25	1,581	2·71	14,191	24·36	..
	1885 ..					25,838	44·36	..	2,357	4·04	80	0·14	14,676	25·20	1,699	2·92	183	0·23	2,424	4·16	21,389	36·69	..
	Mean for 10 years, 1876—1885 ..					15,483	23·81	..	1,340	2·06	174	0·27	11,760	18·10	1,746	2·68	207	0·32	3,846	5·91	19,081	29·34	..

54. In the Sátára Collectorate cholera was present at the close of 1885, and in January 1886 caused 13 deaths, of which 11 occured in the táluka of Koregaon and 2 in Wái. Small-pox caused only 1 death throughout the year. The general death-rate from fevers for

Sátára.

SKELETON MAP
SOUTHERN REGISTRATION DISTRICT
BOMBAY PRESIDENCY

Scale. 40 Miles to 1 Inch

the Collectorate was 19·68 per 1,000 against 23·58 in 1885, but the death-rates in the tálukás of Khatáv, Sátára, Koregaon, and Wái were high as compared with the rate for the Collectorate.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Sátára.	Sátára Rural Circle.	90,885	335·18	271·15	147	4,019	44·22	48·40	..	..	..	..	2,296	25·24	100	1·10	12	0·13	237	2·61	2,644	29·08	38·87
	Jávli do. ..	53,793	419·	128·38	197	1,932	36·29	36·70	..	..	1	0·02	969	17·84	125	0·46	11	0·20	214	3·97	1,210	22·49	24·74
	Wái do. ..	76,934	390·	197·37	124	3,168	41·18	46·22	2	0·03	..	..	1,835	23·85	88	1·23	20	0·26	224	2·90	2,179	28·32	38·32
	Karád do. ..	130,142	394·63	329·78	163	5,773	44·38	45·27	..	..	..	..	2,751	21·14	449	3·45	42	0·32	510	3·92	3,752	28·83	41·05
	Válva do. ..	169,408	543·	311·99	136	6,338	37·38	41·21	..	..	..	..	2,560	15·12	603	3·56	48	0·20	618	3·65	3,829	22·62	28·71
	Tásgaon do. ..	79,704	341·	233·74	49	3,376	42·36	46·87	..	..	..	..	1,079	13·55	359	4·50	16	0·20	406	5·09	1,860	23·34	30·68
	Khánápur do. ..	80,327	531·	151·27	91	3,804	47·36	50·92	..	..	..	..	1,368	17·03	187	2·32	20	0·25	326	4·06	1,901	23·66	38·92
	Khatáv do. ..	74,027	497·	148·95	84	3,851	52·02	53·32	..	..	..	..	1,023	25·98	00	0·33	16	0·21	184	2·49	2,183	29·51	39·32
	Mán do. ..	63,111	649·	80·29	78	3,963	54·94	60·12	..	..	..	..	1,178	22·66	29	0·56	8	0·15	227	4·36	1,442	27·67	40·79
	Malcolm Peth do. ..	9,936	..	..	55	233	23·45	21·84	..	..	..	..	128	12·88	17	1·71	1	0·10	35	3·52	181	18·21	12·48
	Koregaon do. ..	81,187	349·	232·63	74	3,530	43·48	45·66	11	0·14	..	..	1,979	24·37	126	1·55	17	0·20	103	1·27	2,227	27·43	41·73
	Pátan do. ..	112,414	536·	209·73	202	4,749	42·25	46·18	..	..	..	..	2,100	18·68	146	1·29	25	0·22	277	2·47	2,548	22·66	29·85
	Sátára T. C. ..	29,028	0·32	35,400·	1	706	24·32	31·48	..	..	..	..	424	14·60	192	6·61	2	0·07	121	4·17	739	25·45	28·37
	Karád do. ..	10,778	0·37	29,129·73	1	221	20·50	23·47	..	..	..	..	163	15·12	17	1·58	6	0·56	68	6·30	254	23·56	35·44
	Wái do. ..	11,676	2·	5,838·	1	410	35·11	41·62	..	..	..	..	164	14·05	36	3·09	2	0·17	87	7·45	289	24·76	37·00
	1886 ..	1,062,350	4088·	212·98	1,343	44,968	42.35	..	13	0·01	1	..	20,897	19·68	2,444	2·30	246	0·23	3,637	3·42	27,228	25·64	..
	1885 ..					48,467	45·62	.	2,152	2·97	43	0·04	25,053	23·58	3,426	3·22	274	0·26	5,021	4·73	36,968	34·80	..
	Mean for 10 years, 1876—1885 ..					34,325	32·33	..	2,177	2·05	286	0·27	20·813	19·60	2,844	2·68	380	0·36	3,130	2·95	29,630	27·91	..

N. B.—The area in square miles of Malcolm Peth is included in Jávli Táluka, as in the Census Report.

55. In the Ratnágiri Collectorate during 1886 no deaths from cholera were recorded. Small-pox prevailed to a slight extent in the tálukás of Devgad, Rájápur, Ratnágiri, Sangameshvar, and Chiplún, and caused 29 deaths, or 0·03 per 1,000, against 162 or 0·16 in 1885. From the remaining tálukás and towns in the Collectorate no deaths from this disease were reported. The general death-rate from fevers for the Collectorate was 9·34 per 1,000, but a comparatively high death-rate (12·34 per 1,000) took place in the táluka of Chiplún. The death-rate (11·67 per 1,000), which is nearly the same as that in the táluka of Khed (11-13) and in the town of Ratnágiri (11·57) in Dápoli Táluka, was also high. Registration, as before noticed, is very backward in this Collectorate, and the results shown cannot be accepted as accurate.

Ratnágiri.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number	Other Causes. Ratio per 1,000 of Population.	All Causes. Number	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Ratnágiri.	Málvan Rural Circle.	109,953	431·96	254·34	67	2,734	24·86	24·26	..	..	..	..	454	4·13	219	1·99	23	0·21	1,168	10·62	1,884	16·95	14·14
	Devgad do. ..	117,899	543·	217·13	121	2,953	25·05	30·46	..	..	5	0·05	892	6·80	298	2·53	42	0·35	761	6·45	1,998	16·18	13·38
	Rájápur do. ..	127,999	512·	250·00	174	3,190	24·92	25·82	..	..	8	0·06	1,029	8·04	341	2·66	40	0·31	477	3·73	1,895	14·80	12·29
	Ratnágiri do. ..	112,611	302·97	374·99	149	2,962	26·08	27·67	..	..	6	0·05	1,233	10·95	261	2·30	33	0·29	434	3·82	1,960	17·30	15·89
	Sangameshwerdo. ..	104,640	557·	187·86	179	3,445	32·75	19·96	..	..	4	0·04	863	8·25	167	1·59	25	0·24	366	2·98	1,367	13·06	13·03
	Chiplun do. ..	168,921	670·	252·12	212	4,234	25·06	22·34	..	..	6	0·04	2,084	12·34	231	1·37	28	0·16	415	2·45	2,764	16·36	14·66
	Khed do. ..	91,492	400·	228·73	149	2,614	28·57	23·25	..	..	..	..	1,018	11·13	87	0·95	15	0·16	163	1·78	1,283	14·02	18·52
	Dápoli do. ..	141,012	505·	279·23	247	3,190	22·62	23·64	..	..	..	..	1,645	11·67	160	1·13	13	0·09	490	3·47	2,308	16·36	17·09
	Venguria T.C. ..	8,947	0·03	298,233	1	298	33·21	27·94	..	..	..	..	33	3·91	1	0·11	..	..	179	20·01	215	24·03	22·47
	Ratnagiri do. ..	12,016	0·04	315,400	1	366	30·01	26·55	..	..	..	..	146	11·57	7	0·55	2	0·16	78	6·18	233	18·47	15·07
	1886 ..	997,090	3,922	254·22	1,207	25,077	25·15	..	..	..	29	0·03	9,309	9·34	1,772	1·78	220	0·22	4,473	4·48	15,803	15·85	..
	1885 ..					24,175	24·25	..	123	0·12	162	0·16	8,251	8·28	1,275	1·28	317	0·32	4,535	4·54	14,653	14·70	..
	Mean for 10 years, 1876—1885 ..					17,363	17·22	..	485	0·48	495	0·49	10,009	9·93	1,402	1·39	404	0·40	5,009	4·97	17,804	17·66	..

SOUTHERN REGISTRATION DISTRICT.

COLLECTORATES.

1. Belgaum.
2. Dhárwár.
3. Bijápur.
4. Kánára.

Belgaum.

56. In the Belgaum Collectorate only 1 death took place from cholera in May in the town of Belgaum against 3,749, or 4·34 per 1,000, in 1885. Small-pox prevailed to a slight extent in the tálukás of Khánápur, Sampgaon, Chikodi, and Gokák, and caused 7 deaths, or 0·01 per 1,000, against 144 or 0·17 in 1885. The general death-rate from fevers for the Collectorate was 12·20 per 1,000 against 14·09 in 1885; but a high death-rate took place in the tálukás of Khánápur, Belgaum, and Sampgaon. In Khánápur the death-rate was 20·73 per 1,000, in Belgaum 15·52, and in Sampgaon 15·27.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Belgaum.	Belgaum Rural Circle..	95,790	661·55	144·78	199	4,185	43·73	49·30	..	..	..	...	1,486	15·52	539	5·63	21	0·22	351	3·66	2,397	25·03	27·78
	Sampgaon do. ..	119,843	425·	281·98	123	5,164	43·10	44·21	..	..	2	0·02	1,830	15·27	442	3·69	30	0·25	514	4·29	2,818	23·51	45·73
	Khánápur do. ..	79,264	632·	125·42	119	2,797	35·29	38·97	..	..	2	0·03	1,636	20·73	386	4·87	20	0·25	362	4·47	2,406	30·35	35·77
	Chikodi do. ..	245,614	840·	292·40	213	9,945	40·49	44·02	..	..	1	..	2,619	10·26	1,269	5·17	76	0·31	1,801	7·33	5,666	23·07	29·34
	Athni do. ..	94,775	786·03	120·57	89	3,891	41·05	45·67	..	..	..	..	788	8·31	638	6·73	25	0·26	421	4·44	1,872	19·75	27·57
	Gokák do. ..	82,722	670·61	123·35	113	4,100	49·56	46·94	..	..	2	0·02	896	10·83	396	4·80	26	0·31	513	6·20	1,833	22·16	32·13
	Parasgad do. ..	91,826	640·	143·48	127	4,186	45·59	45·38	..	..	..	..	955	10·39	411	4·48	25	0·27	546	5·95	1,937	21·09	30·73
	Belgaum Town Circle ..	23,115	0·45	51266·67	1	459	19·86	23·06	1	0·04	..	..	199	8·61	49	2·12	13	0·56	163	7·05	425	18·39	22·24
	Gokák do. ..	10,307	0·39	26422·21	1	386	37·45	38·31	..	..	..	..	94	9·12	54	5·24	1	0·10	116	11·26	265	25·71	34·35
	Athni do. ..	11,186	0·92	12158·70	1	551	49·26	48·81	..	..	..	..	95	8·49	130	11·62	4	0·36	29	2·59	258	23·06	47·80
	Belgaum Cantonment..	9,582	..	..	..	154	16·07	16·18	..	..	..	..	46	4·80	38	3·96	6	0·63	64	6·68	154	16·07	19·93
	1886 ..	864,014	4,657·	185·53	1,077	35,821	41·46	..	1	..	7	0·01	10,544	12·20	4,352	5·04	247	0·29	4,880	5·65	20,031	23·18	..
	1885 ..					37,949	43·92	..	3,749	4·34	144	0·17	12,176	14·09	5,264	6·09	260	0·30	6,053	7·01	27,640	32·00	..
	Mean for 10 years, 1876—1885 ..					27,676	30·70	..	2,767	3·07	514	0·57	15,360	17·04	3,599	3·99	353	0·39	8,471	9·40	31,064	34·46	..

N. B.—The area of the Cantonment of Belgaum is included in the town of Belgaum, as it is not separately shown in the Census Report.

Dhárwár.

57. In the Dhárwár Collectorate during 1886 no deaths took place from cholera, but small-pox prevailed in each of the tálukás in the Collectorate, except Hubli, Navalgund and its petha Nargund, and Ron. Amongst the town circles there was only 1 death recorded in the town of Dhárwár. The total deaths from this disease for the Collectorate was 76, or 0·08 per 1,000, against 429, or 0·49, in 1885. The general death-rate from fevers for the Collectorate was 16·90 per 1,000, against 17·37 in 1885; but a high death-rate took place in the táluka of Kalghatgi, in which it was 27·38 per 1,000. In the tálukás of Hángal, Kod, and Bankápur the death-rate was also high.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Dhárwár.	Dhárwár Rural Circle..	83,946	423·85	198.06	127	3,885	46·28	49·88	..	..	1	0·01	1,431	17·05	413	4·92	27	0·32	660	7·86	2,532	30·16	31·23
	Mugód Petha do. ..								..	..	..	..	847	16·21	403	7·27	6	0·11	161	2·91	1,416	25·60	33·23
	Hubli do. ..	55,320	309·62	178·56	70	2,765	50·00	41·31															
	Navalgund do. ..	87,832	562.	156·23	69	4,118	46·88	48·77	..	..	..	..	1,013	11·53	453	5·16	13	0·15	402	4·57	1,881	21·41	26·18
	Nargund Petha do. ..																						
	Gadag do. ..	83,332	698·72	119·16	99	3,933	47·20	54·37	..	..	1	0·01	1,149	13·79	410	4·92	21	0·25	437	5·24	2,018	24·21	28·45
	Mundargi Petha do. ..																						
	Karajgi do. ..	83,216	442·	188·27	130	3,921	47·25	45·54	..	..	28	0·34	1,388	16·44	324	3·89	26	0·32	395	4·74	2,141	25·73	30·60
	Bankápur do. ..	76,554	343·	223·19	142	3,528	46·09	50·06	..	..	8	0·10	1,617	21·12	398	7·82	36	0·45	160	2·17	2,424	31·66	32·47
	Ron do. ..	60,724	370·	164·12	59	3,398	55·96	51·33	..	..	..	..	900	14·82	410	6·90	21	0·34	296	3·39	1,546	25·45	32·09
	Kalghatgi do. ..	50,769	279·	181·97	105	1,954	38·49	47·43	..	..	3	0·06	1,390	27·38	335	6·60	14	0·27	237	4·67	1,979	38·98	41·26
	Ránebennur do. ..	64,013	404·63	158·20	121	3,125	48·83	50·93	..	..	12	0·19	989	15·45	237	4·48	16	0·16	267	4·17	1,565	24·45	31·21
	Kod do. ..	80,345	400·	200·89	177	3,581	44·57	45·55	..	..	13	0·16	1,840	22·77	424	5·25	20	0·25	417	5·19	2,704	33·65	32·25
	Hángal do. ..	65,787	2·99	220·02	162	2,701	41·06	40·14	..	..	9	0·14	1,509	22·93	488	7·42	25	0·38	232	3·53	2,263	34·40	34·36
	Dhárwár Town Circle ..	27,191	1·15	23644·35	1	1,197	44·02	42·73	..	..	1	0·04	332	12·25	9	0·33	18	0·66	442	16·29	804	29·56	38·10
	Hubli do. ..	36,677	1·18	31062·20	1	1,092	29·77	35·77	..	..	..	..	313	8·54	88	2·18	17	0·46	293	6·35	643	17·53	25·93
	Gadag Bettigeri do. ..	17,001	0·28	60717·86	1	659	38·76	39·00	..	..	..	..	142	8·35	126	7·41	12	0·71	44	2·59	324	19·06	23·64
	Ránebennur do. ..	10,202	0·37	27572·97	1	402	39·40	47·05	..	..	..	..	97	9·51	24	2·35	7	0·69	141	13·82	269	26·37	26·27
	1886 ..	882,907	4,535·	194·68	1,285	40,261	45·60	..	..	..	76	0·08	14,928	16·90	4,792	5·43	272	0·31	4,441	5·03	24,509	27·75	..
	1885 ..					42,291	47·89	..	1,354	1·53	429	0·49	15,338	17·37	5,659	6·41	265	0·30	5,784	6·55	28,329	32·65	..
	Mean for 10 years, 1876—1885 ..					20,416	31·44	..	2,383	2·55	664	0·71	17,698	18·92	4,731	5·06	366	0·39	6,397	6·83	32,239	34·46	..

N. B.—The births and deaths of pethás are included in their respective tálukás, as the population of the pethás is not shown separately in the Census Report.

Bijápur.

58. In the Bijápur Collectorate during 1886 no deaths were recorded from cholera. Small-pox prevailed to a slight extent in the tálukás of Sindgi, Bijápur, and Indi, but caused only 9 deaths throughout the year, against 59 in 1885—the death-rate being 0·01 per 1,000 against 0·09 in 1885. The general death-rate from fevers for the Collectorate was 12·60 per 1,000 against 16·32 in 1885; but a high death-rate took place in the tálukás of Sindgi and Indi, in which the recorded death-rates were, respectively, 17·47 and 15·07 per 1000.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Bijápur.	Hungund R. C. ...	80,037	518	154·51	160	3,460	43·23	45·64	...	...	...	...	961	12·01	64	0·82	9	0·11	454	5·67	1,490	18·61	24·04
	Muddebihál do. ...	66,924	564	118·69	149	2,679	40·43	45·31	...	...	...	...	798	12·00	77	1·15	27	0·41	215	3·31	1,105	16·60	25·26
	Sindgi do. ...	72,650	812	89·47	141	3,492	48·07	50·16	...	...	3	0·04	1,269	17·47	183	2·52	20	0·28	317	4·36	1,792	24·67	25·72
	Bagevádi do. ...	86,748	764	113·54	120	3,703	42·69	43·07	...	...	...	...	993	11·45	198	2·28	17	0·19	343	4·01	1,556	17·93	28·00
	Bijápur do. ...	65,472	866·87	75·53	91	2,602	39·74	41·28	...	...	4	0·06	716	10·94	273	4·17	18	0·27	161	2·46	1,172	17·90	25·06
	Bágalkot do. ...	89,132	682·88	130·52	162	3,815	42·80	43·13	...	...	...	...	943	10·47	310	3·44	28	0·31	392	4·43	1,666	18·49	26·33
	Badámi do. ...	89,047	676	131·73	165	3,446	38·70	41·68	...	...	...	...	1,183	13·28	245	2·75	23	0·26	205	2·27	1,653	18·56	21·79
	Indi do. ...	71,940	871	82·59	121	3,005	41·77	51·68	...	...	2	0·02	1,084	15·07	67	0·93	18	0·25	323	4·50	1,494	20·77	23·87
	Bijápur T. C. ...	11,424	2·13	5,365·38	1	300	26·25	Included in Bijápur R. C.	...	...	...	...	91	7·97	55	4·81	7	0·61	8	0·70	161	14·09	Included in Bijápur R. C.
	Kaládgi do. ...	7,024	0·12	58,533·33	1	133	18·93	20·50	...	...	...	...	27	3·84	31	4·41	...	...	3	0·43	61	8·68	13·74
	1886 ...	628,489	5,757	110·00	1,141	27,152	42·57	...	...	...	9	0·01	8,043	12·60	1,505	2·25	167	0·26	2,426	3·80	12,150	19·02	...
	1885 ...					28,571	44·75	...	405	0·63	59	0·09	10,422	16·32	1,802	2·82	159	0·25	3,272	5·12	16,120	25·24	...
	Mean for 10 years, 1876—1885 ...					16,858	23·18	...	1,760	2·42	342	0·47	13,910	19·13	1,651	2·27	305	0·40	5,345	7·35	23,313	32·06	..

N. B.—Prior to 1886 the statistics of the town of Bijápur were incorporated in the Bijápur Rural Circle The ratios of births and deaths for Bijápur Rural Circle for 1885 were calculated on a population of 76,896 persons, being the population of táluka and town of Bijápur.

Kánara.

59. In the Kánara Collectorate during 1886 no deaths were recorded from cholera. Small-pox prevailed in each of the tálukás, except Kárwár, Honávar, and Yellápur. Amongst the town circles only 1 death occurred in the town of Kumta. The total deaths from this disease for the Collectorate amounted to 78, or 0·18 per 1,000, against 263, or 0·62 in 1885. From fevers the general death-rate (17·33 per 1,000) for the Collectorate was nearly the same as that in 1885 (17·49), but a remarkably high death-rate (28·90 per 1,000) took place in Mundgod Petha. The death-rate (22·19 per 1,000) in Halyál Táluka and its petha Supa was also high.

An extremely high death-rate (40·77) from all causes, as before noticed, took place during the year in Mungod Petha. It was due to the following causes:—

Cholera ...	... 0·00 per 1,000 of population.	Injuries ...	0·45 per 1,000 of population.
Small-pox ...	... 0·34 do. do.	Other causes	8·65 do. do.
Fevers ...	...28·90 do. do.		
Bowel-complaints...	2·43 do. do.	All causes ...	40·77

so that it was principally due to fever.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Kánara.	Kárwár R. C. ...	53,081	263·21	120·22	51	1,191	35·05	32·93	...	...	...	...	515	15·15	20	0·60	21	0·62	273	8·03	824	24·24	25·04
	Kumta ,, ...	48,329	222·65	116·16	116	1,755	36·16	36·46	...	...	1	0·02	645	13·40	121	2·51	24	0·52	546	11·35	1,338	27·80	29·11
	Ankola Petha ,, ...	34,189	367	93·16	88	1,244	36·40	36·75	...	...	11	0·32	553	16·17	24	0·70	17	0·50	323	9·51	930	27·20	32·73
	Honávar ,, ...	54,199	446	121·48	90	2,130	39·30	38·[illegible]	...	...	...	...	780	14·39	103	1·90	29	0·54	551	10·16	1,463	26·98	26·31
	Bhatkal Petha ,, ...	31,425			31	1,016	32·34	32·16	...	...	1	0·03	334	10·63	37	2·77	15	0·48	257	8·18	694	22·08	21·77
	Sirsi ,, ...	62,400	779	80·10	258	1,517	24·31	26·74	...	...	32	0·51	1,872	29·98	81	1·30	32	0·51	620	10·10	2,637	42·24	34·25
	Siddápur ,, ...	35,653	239	149·20	97	1,069	29·73	31·27	...	...	11	0·31	698	19·57	77	2·16	23	0·65	282	7·91	1,091	30·60	32·21
	Yellápur ,, ...	18,629	269	61·65	7	402	21·63	22·17	...	...	...	...	381	20·45	19	1·02	11	0·59	171	9·18	582	31·25	35·15
	Mundgod Petha ,, ...	17,658			75	447	25·28	28·52	...	...	6	0·34	511	28·90	43	2·43	8	0·45	153	8·65	721	40·77	44·1
	Haliyál ,, ...	61,154	980	62·40	216	1,409	23·04	25·05	...	...	15	0·25	1,357	22·19	150	2·45	23	0·38	345	5·64	1,890	30·91	37·81
	Supa Petha ,, ...																						
	Kárwár T. C. ...	10,761	11·77	1,109·14	1	449	22·63	33·21	...	...	...	...	138	10·63	2	0·15	6	0·44	137	0·90	283	20·57	26·27
	Kumta ,, ...	19,629	7·35	1,440·12	1	374	35·19	35·40	...	...	1	0·09	126	11·85	21	1·98	2	0·19	104	0·78	254	23·89	28·41
	1886 ...	421,840	3,011	107·85	1,100	12,989	30·79	...	...	...	78	0·18	7,310	17·33	748	1·77	212	0·50	3,774	8·95	12,122	28·73	..
	1885 ...					12,506	29·66	...	336	0·80	263	0·62	7,376	17·49	840	1·99	240	0·57	3,959	9·38	13,014	30·85	.
	Mean for 10 years, 1876—1885 ...					11,859	28·91	...	426	1·04	235	0·57	7,378	19·21	1,093	2·66	226	0·55	3,799	9·26	13,657	33·26	.

N. B.—As the population of Supa is included in the Haliyál Táluka in the Census Report, the births and deaths are included in it. The area, in square miles, of pethas are included in their respective tálukás, as they are not separately shown in the Census Report.

EASTERN GUJARA'T REGISTRATION DISTRICT.

COLLECTORATES.

1. Surat.
2. Broach.
3. Kaira.
4. Panch Maháls.
5. Ahmedabad.

Surat.

60. In the Surat Collectorate during 1886 only 1 death took place in Párdi Táluka from cholera in November. In 1885, 646 deaths were attributed to this cause. Small-pox caused 12 deaths against 1 in 1885, the death-rate being 0·02 per 1,000 against none in 1885. Out of 12 deaths from small-pox in the Collectorate, 7 took place in the táluka of Bulsár, 3 in Jalálpor, and 2 in Bárdoli. The general death-rate from fevers for the Collectorate was 20·48 per 1,000 against 22·27 in 1885; but a high death-rate took place in the tálukás of Bárdoli 25·23, Mándvi 24·09, Bulsár 23·69, and Jalálpor 22·79.

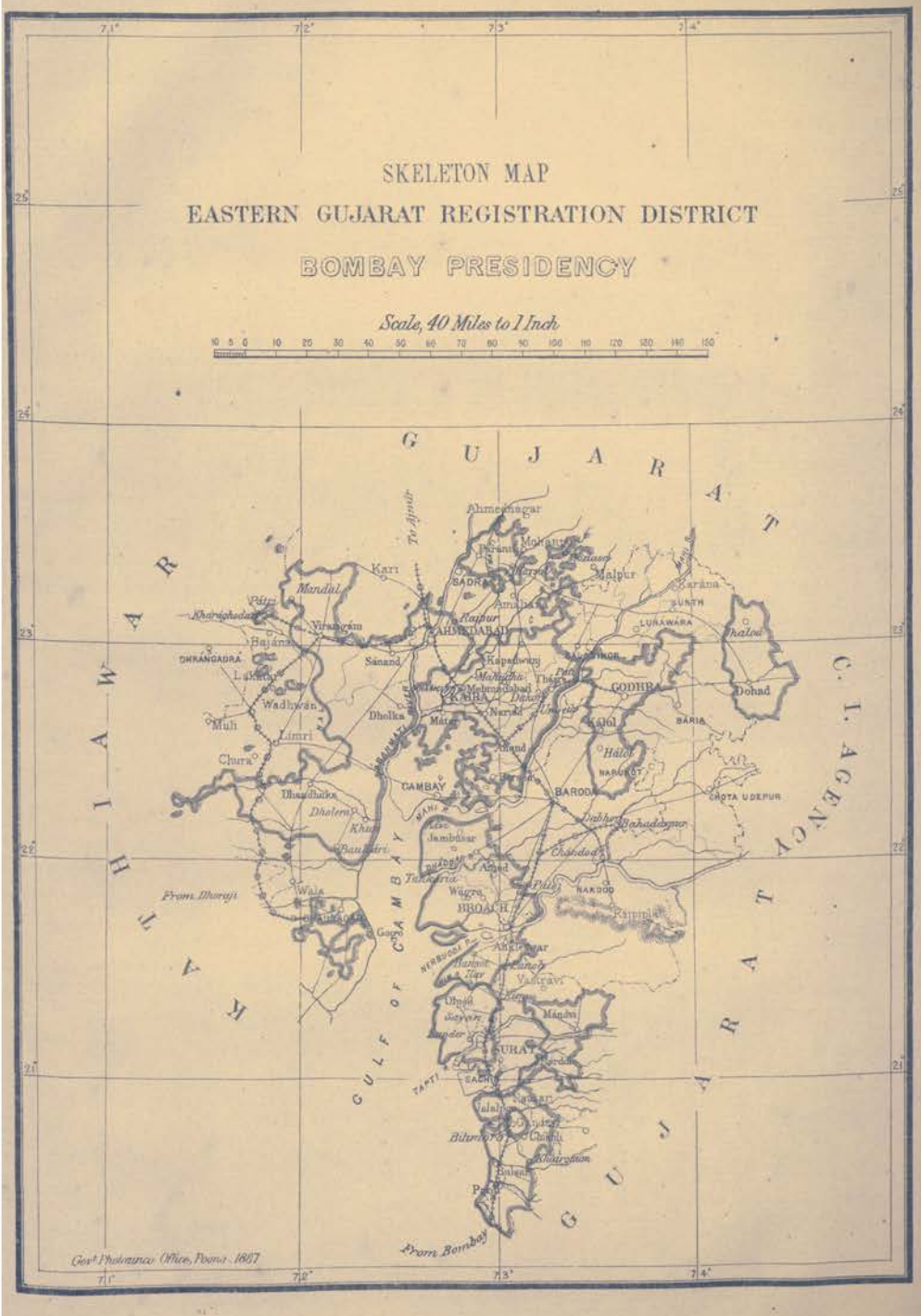
Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Surat.	Olpád R. C.	62,049	223	192·10	120	2,877	46·37	43·63	..	..	..	..	1,224	19·73	305	4·91	27	0·43	201	3·24	1,757	28·32	22·61
	Mándvi do.	50,510	280	181·46	141	2,172	42·75	38·73	..	..	..	..	1,224	24·09	27	0·53	43	0·85	11	0·21	1,305	25·68	22·03
	Chorási do.	44,764	107	418·35	66	1,833	41·39	38·49	..	..	..	..	747	16·69	290	6·48	37	0·82	216	4·82	1,290	28·82	32·66
	Bárdoli do.	76,190	232	328·79	124	3,348	43·93	38·48	..	..	2	0·02	1,918	25·23	149	1·57	22	0·23	24	0·26	2,105	27·66	31·21
	Jalálpor do.	74,016	189	391·62	91	2,926	40·48	38·83	..	..	3	0·04	1,687	22·79	409	5·40	37	0·50	29	0·27	2,147	29·00	30·80
	Chikhli do.	60,147	167	360·16	62	2,529	42·05	38·82	..	..	..	..	1,214	21·84	129	2·14	18	0·30	48	0·80	1,509	25·08	27·50
	Bulsár do.	67,478	205·50	328·36	94	2,912	43·15	39·51	..	..	7	0·12	1,599	23·69	220	3·54	38	0·56	61	0·89	1,944	28·80	32·60
	Párdi do.	55,761	163	342·09	82	2,056	36·87	32·21	1	0·02	..	..	963	17·28	128	2·29	24	0·41	69	1·24	1,185	21·25	24·14
	Surat T. C.	109,844	3	36,614·66	1	3,804	34·63	34·77	..	..	..	..	1,795	16·33	93	0·85	29	0·27	869	7·91	2,786	25·36	30·23
	Bulsár do.	13,229	2·50	5,291·60	1	248	18·75	16·56	..	..	..	..	109	8·24	45	3·40	10	0·76	4	0·30	168	12·70	10·43
	1886 ..	614,198	1,602	399·55	782	24,795	40·37	..	1	..	12	0·02	12,580	20·48	1,780	2·92	285	0·46	1,510	2·47	16,186	26·35	..
	1885 ..					23,031	37·50	..	646	1·05	1	..	13,676	22·27	1,881	3·06	258	0·42	1,596	2·59	18,052	29·39	..
	Mean for 10 years, 1876—1885 ..					18,215	29·83	..	809	1·41	422	0·69	12,228	20·02	1,545	2·53	266	0·44	1,645	2·69	16,966	27·78	..

Broach.

61. In the Broach Collectorate during 1886 there were only 2 deaths from cholera in the táluka of Anklesvar in the months of March and May. Small-pox prevailed to a very slight extent in each of the registration circles in the Collectorate, except the tálukás of Broach and Jambusar, and caused 11 deaths, against 1 in 1885. The general death-rate from fevers for the Collectorate was 26·08 per 1,000, against 32·35 in 1885, but a high death-rate was recorded in each táluka in the Collectorate, except in Anklesvar and its petha Hánsot.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Broach.	Broach R. C.	73,280	300·32	244·01	104	3,045	41·55	28·99	..	..	..	..	2,062	28·14	104	1·42	22	0·30	97	1·32	2,285	31·18	30·91
	Vágra do.	33,602	308	110·07	69	1,524	44·95	28·35	..	..	1	0·03	1,051	31·01	33	0·97	10	0·29	7	0·21	1,102	32·50	41·07
	Amod do.	39,641	176	225·23	48	1,581	39·88	36·78	..	..	3	0·08	1,109	27·94	42	1·06	11	0·28	36	0·91	1,201	30·30	41·38
	Jambusar do.	66,293	372·46	177·99	82	2,804	42·30	35·72	..	..	..	..	1,948	29·39	50	0·75	28	0·42	14	0·21	2,040	30·77	36·32
	Anklesvar do.	65,054	294	221·27	109	2,627	40·38	39·51	2	0·03	3	00·5	1,561	24·00	49	0·75	20	0·31	155	2·38	1,790	27·52	34·53
	Hánsot Petha do.																						
	Broach T. C.	37,281	1·63	22,191·07	1	1,067	28·62	31·97	..	..	3	00·8	608	16·31	5	0·13	16	0·43	216	5·79	848	22·74	32·75
	Jambusar do.	11,470	0·54	21,257·47	1	627	45·91	43·33	..	..	1	00·9	188	16·38	252	21·95	8	0·70	..	..	449	39·12	40·39
	1886 ..	326,930	1,453	225·00	405	13,175	40·30	..	2	0·01	11	00·3	8,527	26·08	535	1·63	115	0·35	525	1·61	9,715	29·71	..
	1885 ..					12,459	38·11	..	210	0·64	1	..	10,576	32·35	696	2·13	130	0·40	779	2·33	12,392	37·90	..
	Mean for 10 years, 1876—1885 ..					8,347	24·65	..	312	0·92	136	0·40	8,827	26·07	607	1·79	127	0·38	637	1·88	10,646	31·44	..

N.B.—The births and deaths in Hánsot Petha are included in Anklesvar Táluka, as the population of each is not separately shown in the Census Report.


SKELETON MAP
EASTERN GUJARAT REGISTRATION DISTRICT
BOMBAY PRESIDENCY
Scale, 40 Miles to 1 Inch
GUJARAT
KATHIAWAR
C. I. AGENCY
GULF OF CAMBAY
Ahmednagar
Kari
Mandal
Virangam
Bajana
DHRANGADRA
Wadhwan
Limri
Dholka
Mater
Sanand
Kapadwanj
Mahudha
Mehmadabad
KAIRA
Nariad
Ahmedabad
Rajpur
SADRA
Amalia
Malpur
Karana
SUNTH
LUNAWARA
Dhalod
GODHRA
Dohad
BARIA
Kalol
Halol
NARUKOT
CHOTA UDEPUR
BARODA
Dabhoi
Bahadarpur
Chandod
NAKDOD
Rajpipla
CAMBAY
Jambusar
Tankaria
Wagra
BROACH
Ankleswar
Vastravi
Mandvi
SURAT
SACHIN
Bilimora
Chikli
Bulsar
Pardi
Dhandhuka
Dholera
Khuri
Baukhari
Wala
Gogo
From Dhoraji
From Bombay
To Ajmer
Gov^t Photozinco Office, Poona. 1887

Kaira.

62. In the Kaira Collectorate during 1886 only 1 death from cholera was reported in the táluka of Borsad in May. Small-pox prevailed to a slight extent, and caused only 6 deaths, or 0·01 per 1,000, against 129 or 0·16 in 1885, 2 of which occurred in the táluka of Thásra, 1 in Borsad, and 1 in Mátar. Amongst the town circles 2 deaths took place in the town of Nadiád. The general death-rate from fevers for the Collectorate was 20·62 per 1,000 against 27·66 in 1885; but a high death-rate (24·62 per 1,000), which is nearly the same as that in the towns of Nadiád (24·31) and Kapadvanj (24·37), was recorded in the táluka of Mátar.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 18-5.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Kaira.	Mehmadabad Rural Circle ..	76,296	173·72	439·19	59	2,585	37·81	38·61	..	..	..	..	1,575	20·64	260	3·41	36	0·47	77	1·01	1,948	25·53	38·24
	Nadiád do. ..	1,05,952	223·67	508·88	93	5,049	37·69	39·37	..	..	..	..	2,672	19·94	361	2·70	62	0·46	121	0·91	3,216	24·01	35·59
	Borsad do. ..	1,31,989	217·81	601·77	89	5,570	42·49	41·13	1	0·01	1	0·01	2,919	22·26	744	5·67	56	0·43	55	0·42	3,776	28·80	22·82
	Anand do. ..	1,64,115	243·	634·23	74	5,926	38·45	40·35	..	..	..	..	2,975	19·30	460	2·99	59	0·38	371	2·41	3,865	25·08	22·23
	Thásra do. ..	84,860	253·	335·44	97	3,265	38·47	39·09	..	..	2	0·02	1,815	21·39	133	1·57	25	0·29	43	0·50	2,018	23·77	31·88
	Kapadvanj do. ..	78,582	279·77	280·88	89	2,915	37·09	39·17	..	..	..	..	1,268	16·13	139	1·77	20	0·33	47	0·60	1,480	18·83	31·65
	Mátar do. ..	78,279	217·	360·73	81	2,952	37·71	38·58	..	1	1	0·01	1,927	24·62	109	1·39	29	0·37	20	0·33	2,092	26·72	35·56
	Kaira Town Circle	12,840	0·28	45,142·86	1	383	30·91	37·49	..	..	..	..	171	13·53	65	5·21	8	0·63	39	3·08	283	22·48	42·40
	Nadiád do.	28,394	0·33	85,769·70	1	953	33·57	34·48	..	..	2	0·07	688	24·31	120	4·24	13	0·46	28	0·99	851	30·06	49·21
	Borsad do.	12,228	0·19	64,357·89	1	343	28·05	19·30	..	..	..	..	235	19·22	..	..	5	0·41	..	..	240	19·63	22·98
	Kapadvanj do.	14,442	0·23	62,791·30	1	402	27·84	28·30	..	..	..	..	352	24·37	32	2·21	14	0·97	25	1·73	423	29·29	38·77
	1886 ..	804,800	1,609	500·18	561	30,643	38·09	..	1	..	6	0·01	16,597	20·62	2,424	3·01	333	0·42	872	1·43	20,193	25·09	..
	1885 ..					31,257	38·88	..	393	0·49	129	0·16	22,257	27·66	3,205	3·98	340	0·42	1,404	1·74	27,728	34·45	..
	Mean for 10 years, 1876—1885 ..					24,270	30·58	..	465	0·50	158	0·20	18,052	22·37	2,199	2·77	334	0·42	1,103	1·39	23,211	29·24	..

Panch Mahále.

63. In the Panch Maháls Collectorate no deaths were reported during 1886 from cholera. Small-pox was present in each of the registration circles in the Collectorate, except Hálol Táluka and the town of Dohad, and caused 30 deaths against 15 in 1885, the death-rate being 0·12 per 1,000 against 0·06 in 1885. But a high death-rate (0·23) took place in Kálol Táluka from this disease. The general death-rate from fevers for the Collectorate was 20·10 per 1,000 against 19·50 in 1885; but a high death-rate took place in the town of Dohad, in which it was 24·93. The recorded death-rate (22·76 per 1,000), which is nearly the same as that in Kálol Táluka (22·58) in the táluka of Hálol, was also high :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Panch Maháls.	Godhra Rural Circle	64,976	597·83	108·69	222	2,498	38·41	41·94	..	..	2	0·03	1,102	16·96	33	0·51	26	0·40	7	0·11	1,170	18·01	19·91
	Dodhad do.	47,210	599·83	147·12	129	1,691	35·81	45·87	..	..	8	0·17	947	20·05	16	0·34	16	0·34	19	0·40	1,006	21·30	16·16
	Jhálod do.	41,020			94	1,421	34·64	43·02	..	..	8	0·19	898	21·89	7	0·17	17	0·41	7	0·17	937	22·84	20·55
	Kálol do.	43,260	415·	184·30	67	1,458	33·70	33·07	..	..	10	0·23	977	22·58	18	0·42	26	0·60	21	0·48	1,052	24·31	25·88
	Hálol do.	33,253			156	1,231	37·02	38·32	..	..	..	..	757	22·76	6	0·18	16	0·48	3	0·09	782	23·51	23·02
	Godhra Town Circle	13,342	0·17	78,482·35	1	229	17·16	17·39	..	..	2	0·15	147	11·02	21	1·57	4	0·30	29	1·65	196	14·69	17·46
	Dohad do.	12,394	0·17	72,965·88	1	321	25·90	23·08	..	..	..	..	309	24·93	8	0·65	8	0·65	13	1·05	338	27·27	31·70
	1886 ..	255,479	1,613	158·38	675	8,757	34·28	..	..	..	30	0·12	5,137	20·10	109	0·43	113	0·44	92	0·36	5,481	21·45	..
	1885 ..					9,997	39·13	..	114	0·45	15	0·06	4,983	19·50	144	0·56	115	0·45	106	0·41	5,477	21·44	..
	Mean for 10 years, 1876—1885 ..					6,573	26·49	..	497	2·00	44	0·18	4,460	17·98	308	1·24	113	0·45	330	1·33	5,752	23·18	..

N. B.—The area, in square miles, of Dohad and Jhálod Táluká is shown together, as well as that of Kálol and Hálol Táluká, in the Census Report.

Ahmedabad.

64. In the Ahmedabad Collectorate during 1886, 6 deaths were reported from cholera in the town of Ahmedabad. In August, there was 1 death, in November 1, and in December 4. From small-pox there were no deaths recorded in the Collectorate throughout the year. The general death-rate from fevers for the Collectorate was 20·76 per 1,000 against 26·54 in 1885, but a very high death-rate took place in the town of Viramgám, in which it was 30·70 per 1,000. The recorded death-rate (25·37 per 1,000) from this disease in the town of Ahmedabad was also high. The death-rates (23·56 and 23·44 per 1,000) recorded in the tálukás of Dholka and Viramgám were high as compared with the death-rate for the Collectorate (20·76 per 1,000) :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Ahmedabad	Daskroi Rural Circle	143,942	345·89	416·26	147	4,933	34·27	33·60	...	...	...	...	2,972	20·37	132	0·92	49	0·34	24	0·17	3,157	21·89	32·49
	Gogha do.	22,307	224·25	99·92	62	1,168	52·36	52·85	...	...	...	...	432	19·37	80	3·59	7	0·31	96	4·03	600	27·00	23·07
	Dhandhuka do.	123,107	1098·	112·12	141	5,348	43·44	41·24	...	...	...	...	1,782	14·47	679	5·52	21	0·17	457	3·72	2,940	23·88	27·36
	Sánand do.	70,964	336·	213·79	85	2,610	33·91	29·21	...	...	...	...	1,238	16·52	44	0·57	50	0·38	28	0·36	1,638	21·24	30·56
	Viramgám do.	117,534	676·39	173·84	155	5,296	44·70	42·47	...	...	...	...	2,726	23·44	230	1·95	29	0·25	68	0·59	3,053	26·24	30·11
	Parántij do.	107,584	449·	239·54	161	3,679	34·21	33·61	...	...	...	...	1,987	18·47	101	0·94	46	0·43	45	0·42	2,179	20·26	24·76
	Dholka do.	93,476	664·25	140·72	117	3,537	37·84	38·01	...	...	...	...	2,202	23·56	166	1·77	46	0·49	56	0·60	2,470	26·42	33·78
	Ahmedabad Town Circle.	124,767	2·29	56,712·27	1	4,848	38·86	39·46	6	0·05	...	...	3,165	25·37	62	0·50	14	0·11	1,278	10·24	4,525	36·27	53·03
	Gogha do.	7,063	0·75	9,417·33	1	295	37·52	40·92	...	...	...	...	132	18·69	73	10·33	6	0·85	...	...	211	29·87	26·65
	Viramgám do.	18,066	0·61	31,131·15	1	787	41·44	38·23	...	...	...	...	583	30·70	243	12·80	8	0·42	23	1·21	857	45·13	53·19
	Dholka do.	17,716	0·75	23,621·33	1	758	44·48	37·09	...	...	...	...	243	13·72	80	4·51	4	0·23	80	4·51	407	22·97	24·40
	Ahmedabad Cantonment ...	1,940	...	...	...	68	35·05	17·52	...	...	...	...	28	14·95	...	...	...	...	...	...	29	14·95	26·80
	European and Eurasians and fighting men in the Cantonment.	914	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
	1886 ...	856,324	3,821	224·10	862	33,257	38·81	...	6	0·01	...	...	17,776	20·76	1,890	2·21	260	0·30	2,150	2·51	22,082	25·79	...
	1885 ...					32,474	37·92	...	176	0·20	17	0·02	22,727	26·54	2,404	2·81	238	0·28	3,136	3·66	28,698	33·51	...
	Mean for 10 years, 1876—1885 ...					22,137	26·28	...	746	0·88	190	0·23	19,087	22·64	1,514	1·80	230	0·27	3,242	3·86	25,019	29·68	...

N. B.—The area of the cantonment of Ahmedabad is included in the town of Ahmedabad, as it is not separately shown in the Census Report.

SIND REGISTRATION DISTRICT.

COLLECTORATES.

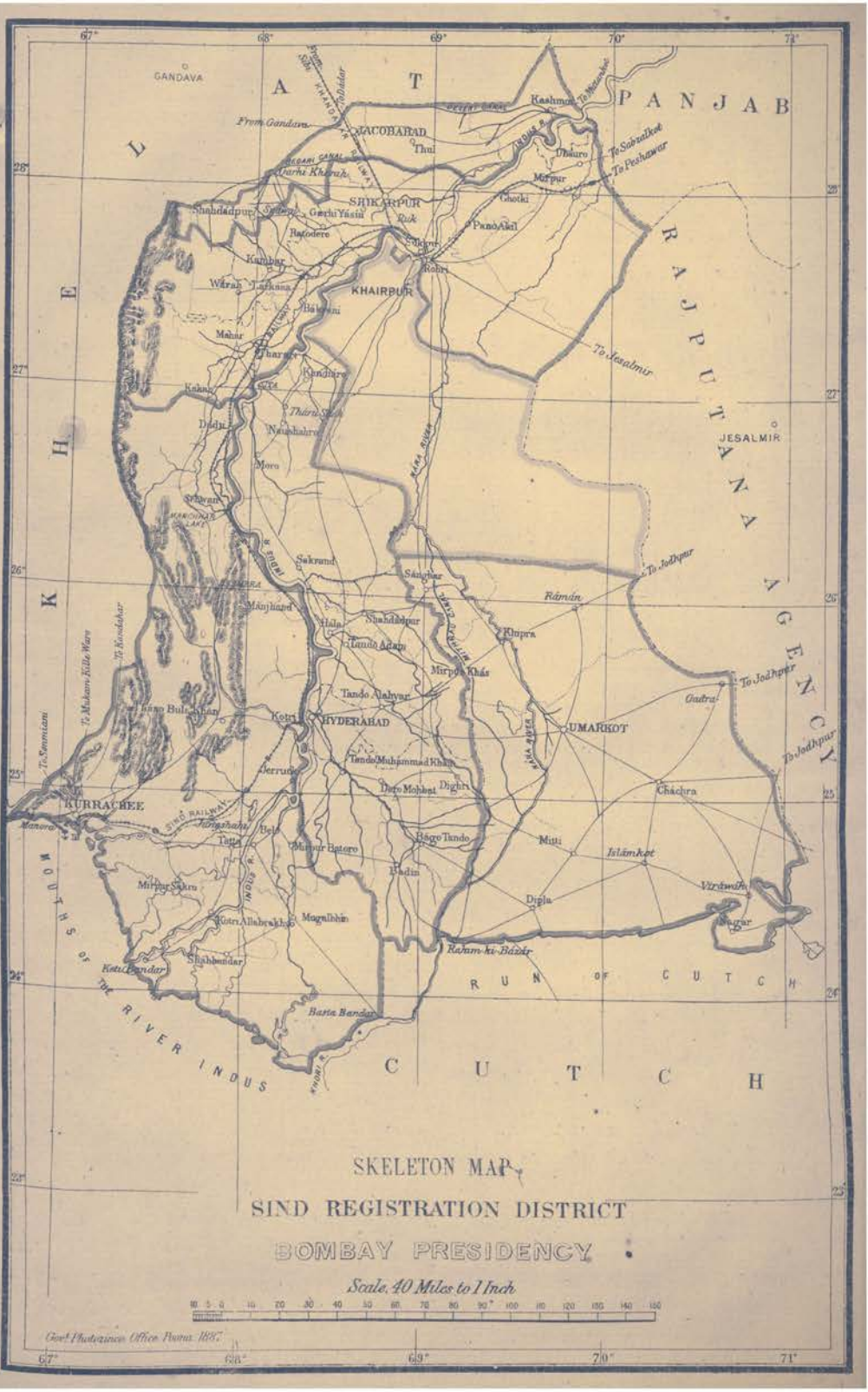
1. Karáchi.
2. Hyderabad.
3. Thar and Párkar.
4. Shikárpur.
5. Upper Sind Frontier.

Karáchi.

65. In the Karáchi Collectorate during 1886 no deaths were recorded from cholera against 4,549, or 9·50 per 1,000 in 1885. Small-pox caused only 7 deaths, or 0·01 per 1,000, against 272, or 0·57 in 1885, 5 of which took place in the táluka of Ghorábári, 1 in Sehwan, and 1 in Mánjhand. The general recorded death-rate from fevers for the Collectorate was 14·04 per 1,000 against 12·90 in 1885 ; but a high death-rate was registered in the tálukás of Mánjhand 17·47, Tatta 16·38, Kotri 16·32, and Mirpur Batoro 16·19.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Karáchi.	Karáchi Rural Circle.	20,256	1,284·34	15·77	Information not available in the Census Report.	204	10·07	9·38	...	...	...	...	125	6·18	0	0·29	1	0·05	15	0·74	117	7·29	18·21
	Kohistan do.	11,937	2,652	4·51		127	10·62	22·00	...	...	...	...	74	6·19	...	...	5	0·42	22	1·84	101	8·43	7·69
	Dádú do. } Johi do. } Sehwan do. }	121,138	1,686	71·83		3,418	23·21	23·72	...	...	...	1	1,576	15·49	67	0·55	80	0·66	233	1·92	2,257	18·63	26·26
	Manjhand do.	18,952	581	32·62		616	27·23	23·74	...	...	...	1	331	17·47	1	0·05	9	0·48	27	1·43	369	19·47	30·92
	Kotri do.	24,870	839	29·64		557	22·40	12·06	...	...	...	...	406	16·32	...	...	18	0·72	73	2·94	407	16·36	17·43
	Tatta do.	39,750	1,323	30·05		633	16·13	15·52	...	...	...	...	651	16·38	7	0·18	25	0·63	128	3·14	808	20·33	23·84
	Sákro do.	21,711	1,103	19·59		420	19·34	18·52	...	...	...	...	369	14·22	2	0·09	21	0·97	7	0·32	399	15·61	46·93
	Ghorabari do.	34,399	566	60·70		770	22·41	15·09	...	...	5	0·15	497	14·46	2	0·06	33	0·96	48	1·40	585	17·03	31·57
	Mirpur Batoro R. C.	32,179	268	120·07		982	30·52	15·02	...	...	...	...	521	16·19	8	0·25	21	0·65	63	1·96	613	19·05	21·81
	Sujawal do.	34,934	267	131·53		958	31·02	12·80	...	...	...	...	379	12·37	5	0·16	23	0·75	49	1·62	457	15·07	22·33
	Jati do.	27,095	2,145	12·63		259	9·24	8·17	...	...	...	...	216	7·76	1	0·04	12	0·44	4	0·15	237	8·52	17·15
	Shahbandar do.	27,814	1,383	20·04		464	16·68	12·80	...	...	...	...	316	11·36	2	0·07	19	0·68	1	0·04	338	12·15	37·32
	Karáchi Town Circle.	69,322	7·66	8,[illegible]·63	1	3,340	48·86	44·72	...	...	...	...	1,030	15·07	105	1·54	39	0·57	789	11·65	1,963	28·73	24·94
	1886 ...	478,588	14,115	33·91	723	12,659	26·45	...	...	...	7	0·01	6,721	14·04	200	0·43	311	0·65	1,456	3·04	8,701	18·17	...
	1885 ...					10,368	21·66	...	4,549	9·50	272	0·57	6,176	12·90	288	0·60	249	0·52	1,178	2·46	12,712	26·55	...
	Mean for 10 years, 1876—1885 ...					7,141	15·82	...	625	1·39	123	0·27	5,099	12·03	150	0·35	278	0·62	1,140	2·58	8,023	17·87	...

N. B.—The new táluka "Johi" is composed of some villages from Dádú and Sehwan Tálukás (*vide* page 1107 of the *Bombay Government Gazette*, dated 27th November 1884). As the population and area according to census of 1881 are not obtainable for each of these tálukás, the births and deaths in Dádú, Johi, and Sehwan Tálukás are shown together.


SKELETON MAP
SIND REGISTRATION DISTRICT
BOMBAY PRESIDENCY
Scale, 40 Miles to 1 Inch
Govt. Photozinco Office Poona 1887.
BALUCHISTAN
PANJAB
RAJPUTANA AGENCY
KHELAT
CUTCH
RUN OF CUTCH
MOUTHS OF THE RIVER INDUS
GANDAVA
JACOBABAD
SHIKARPUR
KHAIRPUR
JESALMIR
KURRACHEE
HYDERABAD
UMARKOT
Kashmor
Ubauro
Mirpur
Ghotki
Panoakil
Sukkur
Rohri
Shahdadpur
Garhi Yasin
Ratodero
Kambar
Warah
Larkana
Bakrani
Mehar
Kandhro
Kakar
Dadu
Nausahro
Moro
Sehwan
Sakrand
Sanghar
Manjhand
Hala
Shahdadpur
Tando Adam
Mirpur Khas
Tando Allahyar
Kotri
Jerruck
Tando Muhammad Khan
Digri
Chachra
Tatta
Mirpur Batoro
Badin
Mitti
Islamkot
Diplo
Virawah
Mugar
Mugalbhin
Kotri Allahbakhsh
Shahbandar
Keti Bandar
Baria Bandar
Raham-ki-Bazar
Ranan
Khipra
Chachra
Ghotra
To Jodhpur
To Jesalmir
To Sabzalkot
To Peshawar
To Kandahar
To Mekran-Kille-Wara
To Sonmiani
To Jodhpur
To Jodhpur
To Jodhpur
To Jodhpur
From Gandava
Gurhi Khairah
Rohri Canal
Begari Canal
Indus R.
Nara River
Hakra River
Manchhar Lake
Sind Railway
Tonashahi
Manora
Kaha River
Khori R.
Indus R.
Bego Tando
Dero Mohbat
Tando Allahyar
Tando Muhammad Khan
Bago Bulo Khan
Mirpur Sakro
Ranan
Khipra
Chachra
Ghotra
Mitti
Islamkot
Virawah
Mugar
Diplo
Badin
Tando Adam
Hala
Shahdadpur
Sakrand
Sanghar
Manjhand
Sehwan
Moro
Nausahro
Dadu
Kakar
Larkana
Kambar
Warah
Mehar
Kandhro
Bakrani
Ratodero
Garhi Yasin
Shahdadpur
Panoakil
Ghotki
Ubauro
Kashmor
Thul
Rohri
Sukkur
Mirpur
Jerruck
Kotri
Tatta
Manora
Keti Bandar
Shahbandar
Kotri Allahbakhsh
Mugalbhin
Baria Bandar
Raham-ki-Bazar
Bego Tando
Dero Mohbat
Digri
Tando Allahyar
Tando Muhammad Khan
Bago Bulo Khan
Mirpur Sakro
Mirpur Batoro
Tatta
Bela
Tonashahi
Manora
Kaha River
Nara River
Hakra River
Indus R.
Khori R.
Manchhar Lake
Sind Railway
Begari Canal
Rohri Canal
Indus R.
Nara River
Hakra River
Indus R.
Khori R.
67°
68°
69°
70°
71°
26°
27°
25°
24°
23°

Hyderabad.

66. In the Hyderabad Collectorate no death was recorded from cholera during 1886, against 3,020 deaths, or 4·00 per 1,000 in 1885. Small-pox prevailed in the tálukás of Hyderabad, Shahdádpur, Kandiáro, Naushahro, and Moro, and in the town of Hyderabad. The death-rate from this cause for the Collectorate was 0·10 per 1,000 against 0·17 in 1885, but a very high death-rate took place in the town of Hyderabad, in which it was 0·99 per 1,000. The general death-rate from fevers for the Collectorate was 17·60 per 1,000 against 14·03 in 1885, but a high death-rate took place in the tálukás of Shahdádpur and Sakrand and in the town of Hyderabad.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Hyderabad.	Hyderabad R. C.	57,830	404	143·14	Information not available in the Census Report.	1,290	22·46	15·53	..	..	1	0·01	808	12·25	13	0·22	27	0·47	31	0·53	880	13·43	26·77
	Gumi ,, ..	71,162	989	71·95		1,655	23·26	15·88	..	..	..	..	1,340	18·83	36	0·50	52	0·73	46	0·65	1,474	20·71	21·47
	Badin ,, ..	65,708	795	82·65		697	10·61	7·56	..	..	..	..	569	8·66	3	0·05	41	0·62	13	0·19	626	9·52	6·97
	Tando Bago ,, ..	55,473	709	78·24		594	10·71	6·99	..	..	..	..	437	8·78	3	0·05	36	0·65	34	0·61	550	10·09	7·30
	Dero Mohbat ,, ..	37,260	670	55·61		922	24·74	22·44	..	..	..	..	524	14·06	3	0·08	17	0·46	91	2·44	635	17·04	25·39
	Hála ,, ..	78,149	531	147·17		1,383	17·70	21·11	..	..	..	..	1,173	15·01	4	0·05	21	0·27	39	0·50	1,237	15·83	12·40
	Tando Alahyar ,, ..	66,126	697	94·87		1,643	24·85	13·19	..	..	..	..	1,293	19·55	10	0·15	32	0·48	26	0·40	1,361	20·58	22·27
	Shahdádpur ,, ..	55,593	733	75·84		1,368	24·61	17·57	..	..	4	0·07	1,401	25·20	5	0·09	34	0·61	16	0·29	1,460	26·26	22·07
	Mirpur Khás ,, ..	24,979	561	44·53		446	17·85	15·53	..	..	..	..	367	14·70	..	..	21	0·84	6	0·23	394	15·77	23·50
	Kandiáro ,, ..	39,336	315	124·87		1,651	41·97	29·49	..	..	13	0·33	855	21·74	14	0·35	31	0·79	18	0·45	931	23·66	19·40
	Naushahro ,, ..	61,295	532	115·22		3,250	53·02	25·45	..	..	13	0·21	1,329	21·68	4	0·07	54	0·88	43	0·70	1,443	23·54	21·94
	Moro ,, ..	44,443	704	63·18		1,799	40·48	25·49	..	..	3	0·07	889	20·00	8	0·18	35	0·79	29	0·65	964	21·69	25·11
	Sakrand ,, ..	62,075	1,300	37·46		1,720	33·03	20·89	..	..	..	..	1,173	22·52	1	0·02	33	0·63	4	0·08	1,211	23·25	26·27
	Hyderabad T. C.	45,195	..	..	1	1,539	34·05	28·23	..	..	45	0·99	1,053	23·30	..	..	18	0·40	307	6·79	1,423	31·48	27·48
	1886 ..	7,54,624	9,030	83·57	1,105	19,966	26·46	..	..	..	79	0·10	13,201	17·60	104	0·14	452	0·57	703	0·93	14,599	19·34	..
	1885 ..					13,353	18·36	..	3,020	4·00	125	0·17	10,583	14·03	97	0·13	400	0·53	750	0·99	14,975	19·85	..
	Mean for 10 years, 1876—1885 ..					8,337	11·36	..	464	0·63	223	0·30	8,344	11·30	85	0·12	460	0·62	615	0·83	10,191	13·80	..

N.B.—The area of the town of Hyderabad is included in the Hyderabad Táluka, as it is not separately shown in the Census Report.

Thar and Párkar.

67. In the Thar and Párkar Collectorate no deaths from cholera were reported during 1886, against 128, or 0·63 per 1,000, in 1885. No deaths from small-pox were registered throughout the year, whilst the general death-rate from fevers for the Collectorate was 14·70 per 1,000 against 12·33 in 1885; but a high death-rate took place in the táluka of Khipra 19·59, and in the town of Umarkot 19·45. The recorded death-rate in Mitti Táluka from this cause (17·07 per 1,000) was also high.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Thar and Párkar.	Umarkot Rural Circle.	38,807	1,107	62·52	Information not available in the Census Report.	903	23·27	22·93	..	..	..	...	489	12·60	1	0·03	27	0·69	3	0·08	520	13·40	18·94
	Chachra do. ..	37,046				1,543	41·65	51·99	..	..	..	..	526	14·20	26	0·70	15	0·40	29	0·78	596	16·09	12·23
	Nagar do. ..	37,512	8,508	9·08		1,944	51·82	33·94	..	..	..	..	534	14·24	1	0·03	12	0·32	2	0·05	549	14·64	10·45
	Mitti do. ..	22,611				1,278	56·52	38·21	..	..	..	..	386	17·07	..	..	12	0·53	10	0·44	408	18·04	12·34
	Dípla do. ..	17,114				767	44·82	47·74	..	..	..	..	281	16·42	..	..	13	0·76	13	0·76	307	17·94	17·88
	Khipra do. ..	26,079	3,114	15·23		696	26·69	16·87	..	..	..	..	511	19·59	..	..	17	0·65	49	1·88	577	22·12	17·33
	Sánghar do. ..	21,347				584	27·36	18·60	..	..	..	..	208	9·74	2	0·09	15	0·70	23	1·08	248	11·61	12·46
	Umarkot Town Circle.	2,828	..	..	1	68	24·04	22·63	..	..	..	..	55	19·45	..	..	..	..	9	3·18	64	22·63	24·05
	1886 ..	2,03,344	12,729	15·98	73	7,783	38·27	..	..	..	..	..	2,990	14·70	30	0·15	111	0·55	138	0·67	3,269	16·07	..
	1885 ..					6,671	32·81	..	128	0·63	8	0·04	2,508	12·33	24	0·12	104	0·51	179	0·88	2,951	14·51	..
	Mean for 10 years, 1876—1885 ..					4,234	22·05	..	32	0·17	12	0·06	2,630	13·69	27	0·14	87	0·45	147	0·77	2,935	15·28	..

N. B.—The area of the town of Umarkot is included in the Umarkot Táluka, as it is not separately shown in the Census Report.

Shikárpur.

68. In the Shikárpur Collectorate no deaths from cholera were recorded during 1886 against 3,410, or 4·00 per 1,000 in 1885. Small-pox was epidemic in this Collectorate, and prevailed in each registration circle, except the táluka of Kakar and the town of Lárkhána. The general death-rate from this cause for the Collectorate was 0·18 per 1,000 against 0·11 in 1885, but a high death-rate took place in the town of Sukkur 0·84 and in the táluka of Shikárpur 0·67. In the tálukás of Rohri and Ghotki the death-rates from this cause (0·33 and 0·30 per 1,000) were also high. The general death-rate from fevers for the Collectorate was 15·67 per 1,000 against 12·60 in 1885, but a high death-rate took place in the táluka of Kakar, in which it was 21·82 per 1,000. In the town of Lárkhána the death-rate (19·86) was also high:—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Num ber for 1886.	Births. Ratio per 1,000 of Population	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Shikárpur.	Shikárpur R. C.	32,616	477·50	68·30	Information not available in the Census Report.	969	29·71	16·10	..	..	22	0·67	432	13·24	7	0·21	13	0·40	2	0·07	476	14·59	14·21
	Sukkur do.	51,238	284	180·41		1,780	34·74	24·18	..	..	15	0·29	965	18·83	3	0·06	29	0·57	6	0·11	1,018	19·87	38·23
	Naushahro do.	65,728	402	138·62		2,140	32·40	13·19	..	..	4	0·06	1,023	15·56	3	0·05	23	0·41	8	0·14	1,061	19·04	14·71
	Rohri do.	68,582	1,550	44·25		1,616	23·56	16·14	..	..	22	0·33	975	14·21	27	0·40	36	0·52	30	0·43	1,090	15·89	16·64
	Ghotki do.	61,502	554	110·01		1,830	29·90	20·16	..	..	18	0·30	877	14·26	9	0·14	13	0·21	7	0·11	924	15·02	14·06
	Mirpur do.	39,112	1,721	22·73		1,235	31·58	13·88	..	..	7	0·19	516	13·19	..	..	10	0·25	6	0·15	539	13·78	11·25
	Ubauro do.	39,918	450	88·71		606	15·18	5·01	..	..	2	0·06	394	9·87	6	0·16	12	0·30	3	0·08	417	10·44	13·68
	Lárkhána do.	83,952	291	288·49		2,481	29·55	20·33	..	..	1	0·01	1,112	13·25	1	0·01	40	0·47	4	0·05	1,158	13·79	13·23
	Kambar do. / Rato-dero do. / Shahdádpur R. C.	151,489	1,396	208·79		4,950	32·68	21·04	..	..	25	0·17	2,316	15·29	5	0·03	68	0·45	47	0·31	2,461	16·25	16·91
	Kakar do.	49,500	508	82·78		1,862	37·62	16·30	..	..	..	..	1,080	21·82	5	0·10	21	0·42	16	0·32	1,122	22·67	16·51
	Lahdárya do. / Mehar do. / Nasirabad do.	135,998	1,133	488·10		5,079	37·27	34·40	..	..	4	0·03	2,329	17·14	7	0·05	61	0·45	30	0·22	2,431	17·89	17·12
	Shikárpur T. C.	42,496	9·50	4,473·26	1	827	19·46	18·35	..	..	5	0·11	728	17·13	9	0·21	9	0·21	54	1·28	805	18·94	19·79
	Sukkur do.	27,389	..	..	1	754	27·53	15·33	..	..	23	0·84	359	13·10	54	0·97	37	1·35	89	3·26	562	20·52	25·70
	Lárkhána do.	18,188	..	..	1	533	40·42	29·04	..	..	..	..	262	19·86	2	0·16	4	0·30	29	2·20	297	22·52	20·85
	Travelling Population..	368																					
	1886 ..	852,986	10,001	85·29	1,372	25,671	31·27	..	..	..	148	0·18	13,368	15·67	188	0·16	376	0·44	331	0·39	14,361	16·84	..
	1885 ..					16,232	19·03	..	3,410	4·00	98	0·11	10,745	12·60	207	0·24	315	0·36	278	0·33	15,053	17·64	..
	Mean for 10 years, 1876—1885 ..					10,789	13·24	..	543	0·67	141	0·17	9,340	11·47	209	0·26	319	0·39	330	0·40	10,882	13·36	..

N.B.—The total area of the Collectorate includes the area of the Khistan Hill, which is 1,155 square miles.

The births and deaths in Kambar, Rato-dero and Shahdádpur Tálukás have been taken together, as the population, according to the census of 1881, is not obtainable for each separately. So for the tálukas of Lahdarya, Mehar, and Nasirabad the births and deaths have been added together.

The areas, in square miles, of the towns of Sukkur and Lárkhána are included in their respective tálukás, as they are not separately shown in the Census Report.

Upper Sind Frontier.

69. In the Upper Sind Frontier Collectorate no deaths from cholera were reported during 1886 against 612 deaths, or 4·93 per 1,000 in 1885. Small-pox prevailed to a slight extent in each táluka of the Collectorate, and caused 12 deaths or 0·10 per 1,000, against 27 or 0·22 in 1885. The general death-rate from fevers for the Collectorate was 11·23 per 1,000, against 9·07 in 1885; but a high death-rate took place in the town of Jacobabad, in which it was 17·44 per 1,000.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1886.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1885.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1885.
Upper Sind Frontier.	Jacobabad Rural Circle	25,972	455	57·08	Information not available in the Census Report.	919	35·38	16·36	..	..	1	0·04	335	12·90	..	..	4	0·15	16	0·62	356	13·71	1,117
	Thul Rural Circle ..	43,025	821	52·41		1,126	26·17	13·50	..	..	7	0·16	458	10·64	1	0·02	14	0·33	8	0·19	488	11·34	1,297
	Kashmor do. ..	43,832	863	50·79		1,041	23·75	11·16	..	..	4	0·09	403	9·19	11	0·25	7	0·16	1	0·02	426	9·72	2,007
	Jacobabad Town Circle	11,352	..	..	1	216	19·03	12·33	..	..	..	..	198	17·44	27	2·38	3	0·26	45	3·96	273	24·05	2,326
	1886 ..	124,181	2,139	58·05	143	3,302	26·59	..	..	..	12	0·10	1,394	11·23	39	0·31	28	0·23	70	0·56	1,543	12·43	..
					1885 ..	1,635	13·17	..	612	4·93	27	0·22	1,126	9·07	52	4·42	28	0·23	54	0·43	1,899	15·29	..
	Mean for 10 years, 1876—1885 ..					1,215	11·35	..	82	0·77	20	0·18	875	8·17	34	0·32	35	0·33	52	0·48	1,098	10·25	.

N.B.—The area of the town of Jacobabad is included in the Jacobabad Táluka, as it is not separately shown in the Census Report.

Death-rates in Cantonments in British territory.

70 The following table shows the recorded death-rate in each of the 7 cantonments in British territory in 1886 contrasted with the results of the preceding year:—

Cantonments.	Death-rate per 1,000 of Population. 1886.	Death-rate per 1,000 of Population. 1885.
Devláli	23·02	47·88
Málegaon	31·48	52·38
Ahmednagar	17·65	20·05
Poona	27·19	32·58
Kirkee	35·39	26·12
Belgaum...	16·07	19·93
Ahmedabad	14·95	26·80

It will be seen that in each of the 7 cantonmemts, except Kirkee, the recorded death-rate in 1886 was lower than in 1885. In the cantonment of Devláli the recorded death-rate (23·02 per 1,000 of population) was less than half the death-rate of 1885 (47·88). Much greater attention as regards registration appears to be required in the cantonments of Ahmednagar, Belgaum, and Ahmedabad, where the recorded death-rates cannot be accepted as even approximately correct.

Statistics for Cantonment Bázárs in *quasi* foreign territory.

71. The following table shows the vital statistics among the civil population in those cantonments which are situated in *quasi* foreign territory. The total number of births registered in these cantonments during the year 1886 was 2,585 against 2,607 in 1885, the birth-rate being 26·96 per 1,000 of population against 28·91 in 1885. In Aden (municipal limits), Baroda, Mehidpur, and Nasirabad the recorded birth-rate was higher than in 1885. In the remaining cantonments it was lower.

Cantonments.	Ratio per 1,000 of Population. Birth-rate, 1886.	Ratio per 1,000 of Population. Birth-rate, 1885.
Aden (municipal limits)	13·61	11·08
Baroda	18·24	16·58
Bhúj	16·76	30·73
Deesa	36·77	39·16
Mehidpur	35·40	8·85
Mhow	21·29	27·30
Nasirabad	51·30	48·27
Neemuch...	33·39	39·48
Rájkot	8·66	10·88

The total number of deaths in these cantonments during the year was 2,946, equal to a ratio of 30·75 per 1,000, against 3,551, or 39·37 in 1885. 27 deaths were recorded from cholera against 303 in 1885. All these deaths took place in the cantonment of Nasirabad in November. From small-pox there were 27 deaths, against 8 in 1885, 26 of which took place in Nasirabad and 1 in Mhow. The deaths from fevers were 1,146 against 1,379 in 1885. A high death-rate from fevers is reported

From Deesa	... ...	22·32 per 1,000
„ Mehidpur	... ...	17·70 do.
„ Baroda	... ...	15·75 do.
„ Mhow	... ...	14·82 do.
„ Bhúj	... ...	13·96 do.
„ Nasirabad	... ...	13·70 do.

Bowel-complaints caused 316 deaths against 389 in 1885. In Aden (municipal limits) 205 deaths, or a quarter of the total deaths, were ascribed to this cause. This points almost conclusively to an impure water-supply. Injuries caused 29 deaths, against 23 in 1885, and the number from other causes amounted to 1,401, against 1,449 in 1885.

Cantonments.	Civil Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Births.	Ratio of Births per 1,000 of Population.	Number of Deaths.							Ratio per 1,000 of Population.						
						Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	Other Causes.	All Causes.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	Other Causes.	All Causes.
Aden . Municipal limits ..	*29,533	6	4,922·17	402	13·61	..	..	258	205	11	534	1,008	..	..	8·74	6·94	0·37	18·08	34·13
Aden . Purely Civil portion of Cantonment ..	793	†5	..	8	3·78	..	..	2	..	..	1	3	..	..	2·52	..	..	1·26	3·78
Baroda	2,412	1	2,412	44	18·24	..	..	38	9	..	8	55	..	..	15·75	3·73	..	3·32	22·80
Bhúj	358	1·04	344·23	6	16·76	..	..	5	..	..	2	7	..	..	13·96	..	..	5·59	19·55
Deesa	3,376	5	1,675·20	308	36·77	..	..	187	23	..	73	283	..	..	22·32	2·75	..	8·72	33·79
Mehidpur	113	2	56·50	4	35·40	..	..	2	..	..	..	2	..	..	17·70	..	..	..	17·70
Mhow	17,471	6·50	2,687·85	372	21·29	..	1	259	3	3	287	553	..	0·06	14·82	0·17	0·17	16·43	31·65
Neemuch	12,639	4·52	2,796·24	422	33·39	..	.	124	2	..	184	310	..	..	9·81	0·16	..	14·56	24·53
Nasirabad	19,123	8·00	2,390·37	981	51·30	27	26	262	72	15	309	711	1·41	1·36	13·70	3·77	0·78	16·16	37·18
Rájkot	4,965	Not	given.	43	8·66	..	..	9	2	..	3	14	..	..	1·81	0·40	..	0·60	2·82
Total ..	95,783	39·06	2,452·20	2,585	26·96	27	27	1,146	316	29	1,401	2,946	0·28	0·28	11·96	3·30	0·30	14·63	30·75

N.B.—The population and area in square miles for Aden are shown as furnished by the Assistant Political Resident in charge of the municipality.

*According to the census of 1881. The Duswin Bázár, containing a population of 355 persons and which was formerly a part of cantonment, was since 1881 placed in municipal limits.

† This is the area of the *whole* of the cantonment. The purely civil population is mixed up with the military, and it is impossible to give, therefore, the population per square mile.

The population at Aden is so fluctuating that it is difficult to state exactly what it amounts to, and the fact that the number of males is very nearly twice that of the females, must be remembered in reading the reported birth-rate. The registration of deaths is practically exact, as no burial can take place except upon a permit. Since September a special staff has been engaged in registering the births; and Captain Sealy, the zealous municipal officer, deserves, in my opinion, much credit for the way he has organised measures necessary for the improvement of the vital statistics at Aden.

The registration of vital statistics in the cantonment of Nasirabad was, as usual, very well carried out. The registration of births in the cantonments of Baroda, Bhúj, Mhow, and Rájkot is far below what it ought to be. In the cantonment of Deesa, Mehidpur, and Neemuch the registration of births appears to have been fairly well attended to. At Rájkot the registration of vital statistics, as pointed out last year, as well as in the year before, is very much neglected. Surely some steps are necessary for its improvement, and I hope that Government in the Military Department will be pleased to call attention to this matter.

SECTION VI.

HISTORY OF CHIEF DISEASES.

CHOLERA.

Mortality in 1886.

72. During 1886, 89 males and 78 females, or a total of 167 persons, died from cholera, while in the preceding year there were 37,287 deaths from this cause.

Monthly Mortality.

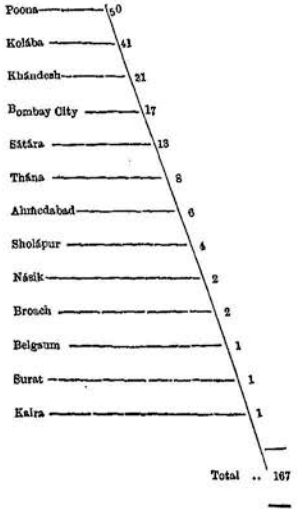
73. The following table shows the monthly distribution of these deaths in each Collectorate as compared with 1885 and the decennial mean :—

Months.	Mean for 10 Years, 1876—85.		1885.		1886.		Deaths by Collectorates during 1886.																							
	Number of Deaths.	Ratio per 1,000 of Population.	Number of Deaths.	Ratio per 1,000 of Population.	Number of Deaths.	Ratio per 1,000 of Population.	Khándesh.	Násik.	Thána.	Bombay (City).	Kolába.	Ahmednagar.	Poona.	Sholápur.	Sátára.	Ratnágiri.	Belgaum.	Dhárwár.	Bijápur.	Kánara.	Surat.	Broach.	Kaira.	Panch Mahále.	Ahmedabad.	Kaira.	Hyderabad.	Thar and Párkar.	Shikárpur.	Upper Sind Frontier.
January	725	0·04	799	0·05	83	0·01	..	2	7	3	4	..	50	4	13	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
February	788	0·05	743	0·05	2	0·00	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
March	1,413	0·09	1,294	0·08	1	0·00	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
April	2,163	0·13	1,144	0·07	1	0·00	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
May..	3,659	0·22	3,481	0·21	5	0·00	..	..	..	2	..	..	..	..	..	..	1	..	..	..	..	1	1	..	..	..	..	..	..	..
June	4,925	0·30	9,310	0·57	2	0·00	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
July	5,150	0·32	11,450	0·69	8	0·00	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
August	3,705	0·23	4,834	0·30	11	0·00	10	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
September..	1,411	0·09	1,690	0·10	28	0·00	3	..	..	3	22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
October	872	0·05	1,669	0·10	16	0·00	..	..	1	..	15	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
November	483	0·03	654	0·04	3	0·00	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..
December	444	0·03	199	0·01	7	0·00	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	..	..	..	..	..
Total ..	25,738	1·57	37,287	2·27	167	0·01	21	2	8	17	41	..	50	4	13	..	1	..	..	..	1	2	1	..	6	..	..	..	..	..

83 of these deaths occurred in 7 Collectorates during the month of January, when the intensity of the epidemic of the preceding year suddenly ceased, as in February throughout the Presidency there were only 2 deaths which occurred in the City of Bombay. In March a fatal case took place in the Broach Collectorate, and in April 1 death was recorded in Bombay. In May, 5 deaths were registered—2 in Bombay, 1 in Belgaum, 1 in Broach, and 1 in Kaira. In June there were only 2 deaths in Bombay. A slight outbreak took place in Khándesh in July, and 8 deaths were recorded. In August there were 10 deaths in Khándesh and 1 in Ahmedabad. In September the disease ceased in Khándesh after causing 3 deaths; there were also 3 deaths in Bombay, and 22 in Kolaba. In October 1 death was reported in Thána and 15 in Kolába. In November there was 1 death in Bombay, 1 in Surat, and 1 in Ahmedabad, whilst in December there were 3 deaths in Bombay and 4 in Ahmedabad. During the year, no death was recorded from cholera in the Collectorates of Ahmednagar, Ratnágiri, Dhárwár, Bijápur, Kánara, Panch Mahále; and Sind was also entirely free. There were only 17 deaths, during the year, in the City of Bombay, and yet in the month of December the Turkish authorities placed Bombay in quarantine. The absurdity of such action will be manifest from a study of the table.

Deaths by Collectorates.

74. The following table shows the deaths in the affected Collectorates arranged in order of sequence :—



Total Mortality for 21 years.

75. We know so little about the laws which govern the prevalence of cholera, that it would be useless to speculate as to why the disease after causing 37,287 deaths in 1885 should suddenly cease in the first month of 1886. The following table shows the total number of deaths from cholera in each of the 21 years ending 1886, and all that we can safely say is that there appears to be a period of lessened intensity every second or third year :—

1866	23,027	1876	32,117
1867	5,143	1877	57,252
1868	6,347	1878	46,743
1869	52,230	1879	6,937
1870	2,666	1880	684
1871	5,821	1881	16,694
1872	15,642	1882	7,904
1873	283	1883	37,954
1874	37	1884	13,804
1875	47,555	1885	37,287
Total ...	158,751	Total ...	257,376
		1886	167

The lessened prevalence of cholera during 1886 was certainly not due to any diminution of filth in and around the villages and towns in the Presidency, and the only way to account for it is by the supposition that the factor necessary for its development (probably atmospheric) was absent.

Statement appended to Cholera Map.

76. The following table is the statement ordered by the Government of India to be appended to the cholera map, and it shows each Collectorate affected by cholera; the name and number of each circle; its population; the dates of first and last cases; the total cholera deaths; their ratios per 10,000 of population; the period of maximum intensity; the number of villages in each rural circle; and the number of those affected and not affected by the disease.

SKETCH MAP
TO ILLUSTRATE THE
DISTRIBUTION OF, AND COMPARATIVE MORTALITY
from
CHOLERA
in the
DIFFERENT CIRCLES OF MORTUARY REGISTRATION
OF THE PRESIDENCY OF BOMBAY
During the Year
1886
Scale 40 Miles to 1 Inch
STATEMENT SHEWING VITAL STATISTICS &c IN EACH COLLECTORATE DURING 1886
BOMBAY
RAJPUTANA AGENCY
CENTRAL INDIA
GULF OF CAMBAY
KARACHI
RATNAGIRI
KARWAR
MADRAS PRESY

Statement appended to Cholera Map, illustrating the Distribution, &c., of Cholera in the Bombay Presidency during the year 1886.

1	2	3	4	5	6	7	8	9		10	11	
Collectorates.	Number of Circles as shown in the Map.	Name of Circle.	Population.	Date of first case of Cholera in the Circle during the year.	Date of last case of Cholera in the Circle during the year.	Total Deaths from Cholera in the Circle during the year.	Ratio per 10,000.	Period of Maximum Intensity of the Disease. From	To	Number of Villages in each of the Rural Circles.	Number of those Affected by Cholera.	Not affected by Cholera.
Khándesh	1	Chopda .. ... R.C.	45,903	3rd Sept. 1886	5th Sept. 1886	3	0·65	Sept. 1886	Sept. 1886	91	1	90
	2	Edalabad Petha . „ *	*90,180	24th July „	20th August „	18	1·87	July „	August „	188	1	187
Násik	3	Násik Town .. T.C.	24,101	10th January „	10th January „	2	0·83	January „	January „	..	..	..
Thána	4	Bassein .. .. R.C.	68,967	19th October „	19th October „	1	0·14	October „	October „	92	2	91
	5	Karjat .. .. „	82,062	10th January „	14th January „	7	0·85	January „	January „	268	1	267
Bombay	6	Bombay (City) .. T.C.	773,196	15th „ „	20th December „	17	0·22	....	....	..	..	..
Kolába	7	Alibág .. .. R.C.	69,762	5th Sept. „	10th October ..	37	5·30	Sept. „	October „	171	2	169
	8	Nágothna Petha „ †	70,200	2nd January „	4th January „	4	0·57	January „	January „	199	2	197
Poona..	9	Junnar .. .. „	91,000	4th „ „	10th „ „	1	0·11	„ „	„ „	153	1	152
	10	Khed .. .. „	141,890	3rd „ „	9th „ „	5	0·35	„ „	„ „	244	1	243
	11	Havell .. .. „	150,059	1st „ „	31st „ „	40	2·67	„ „	„ „	237	5	232
	12	Poona (City) .. T.C.	99,622	1st „ „	10th April „	4	0·40	„ „	„ „	..	..	..
Sholápur	13	Bársi .. .. R.C.	93,920	1st „ „	1st January „	4	0·43	„ „	„ „	122	1	121
Sátára	14	Wái .. .. „	88,610	3rd „ „	6th „ „	2	0·23	„ „	„ „	124	1	123
	15	Koregaon .. „	81,187	1st „ „	15th „ „	11	1·35	„ „	„ „	74	3	71
Belgaum	16	Belgaum .. .. T.C.	23,115	14th May „	14th May „	1	0·43	May „	May „	.	..	..
Surat	17	Párdi .. .. R.C.	55,761	25th „ „	17th November „	1	0·18	Nov. „	Nov. „	82	2	80
Broach	18	Anklesvar .. „ ‡	65,054	4th March „	21st August „	2	0·31	March and May.	March and May.	100	4	96
Kaira	19	Borsad .. .. „	131,093	27th May „	27th May „	1	0·08	May „	May „	89	1	88
Ahmedabad	20	Ahmedabad .. T.C.	124,767	18th August „	17th December „	6	0·49	Aug., Nov. and December.	Aug., Nov. and December 1886.	..	..	..

N.B.—As the population and the total of villages for the undermentioned places cannot be obtained for each, they are grouped, and the ratios are calculated on the grouped population.

	Population	Villages.		Population.	Villages.		Population.	Villages.
* Bhusával R.C. / Edalabad Petha.	96,180	188	† Pen R.C. / Nágothna Petha R.C.	70,200	199	‡ Anklesvar R.C. / Hánsot.	65,054	100

Cholera Map.

77. The map illustrates the distribution of, and mortality from, cholera in the different registration circles in which the disease was present. As usual, a statement is embodied for easy reference, showing in each district the area, population, density per square mile, number of registration circles and villages, deaths from different causes, birth and death-ratios, and dates of the first and last cases of cholera. The map has also been coloured in different shades of green according as a high or low death-rate obtained in the affected districts.

SMALL-POX.

Small-pox Mortality by Sexes.

78. During 1886, the deaths from small-pox of 448 males and 428 females, or a total of 876 persons, were recorded against 2,646 in 1885 and a decennial mean of 7,841.

Small-pox Deaths since 1875.

79. The number of deaths registered from this disease in each year since 1875 is as follows:—

Years.	Number of Deaths.	Years.	Number of Deaths.
1875	3,461	1881	539
1876	11,817	1882	1,630
1877	27,369	1883	13,404
1878	4,475	1884	14,438
1879	1,156	1885	2,646
1880	940	1886	876
Total ...	49,218	Total ...	33,533

Deaths by Districts and Collectorates.

86. In the following table these deaths are shown by Districts and Collectorates :—

Districts.	No.	Collectorates.	Population according to Census of 1881.	Deaths from Fever in: Mean for 10 years from 1876 to 1885.	Ratio per 1,000 of Population.	1885.	Ratio per 1,000 of Population on Census of 1881.	1886.	Ratio per 1,000 of Population on Census of 1881.
Western Registration District ..	1	Khándesh	1,237,231	20,793	18·35	27,315	22·08	28,330	22·90
	2	Násik	781,206	15,407	20·59	20,178	25·83	14,042	17·97
	3	Thána	867,367	14,108	18·04	16,150	20·00	14,745	18·26
	4	Bombay	773,196	7,523	10·62	6,479	8·38	5,843	7·56
	5	Kolába	482,830	6,704	14·51	7,292	15·10	7,871	16·30
Central Registration District ..	6	Ahmednagar	751,228	14,867	19·50	18,304	24·36	15,107	20·11
	7	Poona	900,621	14,934	16·52	19,869	22·06	14,772	16·40
	8	Sholápur	583,437	11,769	18·10	14,676	25·20	11,358	19·50
	9	Sátára	1,062,350	20,813	19·60	25,053	23·58	20,897	19·68
	10	Ratnágiri	997,090	10,009	9·93	8,251	8·28	9,309	9·34
Southern Registration District .	11	Belgaum	864,014	15,360	17·04	12,176	14·09	10,544	12·20
	12	Dhárwár	882,907	17,698	18·92	15,338	17·37	14,923	16·90
	13	Bijápur	638,493	13,910	19·13	10,423	16·32	8,043	12·60
	14	Kánara	421,840	7,878	19·21	7,376	17·49	7,810	17·33
Eastern Gujarát Registration District	15	Surat	614,198	12,228	20·02	13,676	22·27	12,680	20·48
	16	Broach	326,930	8,827	26·07	10,578	32·35	8,527	26·08
	17	Kaira	894,800	18,952	21·87	22,257	27·66	16,897	20·62
	18	Panch Mahúls	255,479	4,490	17·93	4,983	19·50	5,137	20·11
	19	Ahmedabad	856,324	19,087	22·64	22,727	26·54	17,776	20·76
Sind Registration District	20	Karáchi	478,688	5,699	12·63	6,176	12·90	6,721	14·04
	21	Hyderabad	724,654	8,344	11·30	10,583	14·03	13,261	17·99
	22	Thar and Párkar	203,344	2,630	13·69	2,508	12·33	2,969	14·70
	23	Shikárpur	852,986	9,340	11·47	10,745	12·60	13,268	15·67
	24	Upper Sind Frontier	124,181	875	8·17	1,126	9·07	1,394	11·23

ABSTRACT.

Western Registration District	4,081,830	64,540	16·83	77,414	18·96	70,831	17·35
Central do. do.	4,293,776	72,392	16·50	86,153	20·06	71,443	16·64
Southern do. do.	2,807,254	54,846	18·44	45,313	16·14	40,825	14·54
Eastern Gujarát Registration District	2,857,731	63,554	22·42	74,219	25·97	60,617	21·21
Sind Registration District	2,413,823	26,888	11·67	31,133	12·90	37,734	15·63
Total ..	16,454,414	2,82,220	17·27	314,237	19·10	281,450	17·10

By Districts.

In the Sind Registration District fever caused a higher mortality (15·63 per 1,000) during the year than in 1885 (12·90). In the Eastern Gujarát Registration District the fever death-rate fell from 25·97 in 1885 to 21·21, which is below the decennial mean of 22·42. In the Western Registration District the ratio was 17·35 against 18·96 in 1885 and 16·83 the decennial mean. In the Central Registration District the ratio was 16·64 against 20·06 in the previous year and 16·50 the mean for the last ten years. In the Southern Registration District the rate for the year 14·54 was below the rate than in 1885, 16·14, and the mean 18·44. The Collectorate of Broach heads the list with a millesimal rate of 26·08 against 32·35 in 1885 and 26·07 in the previous 10 years; and the following Collectorates have also high rates :—Khándesh 22·90, Ahmedabad 20·76, Káira 20·62, Surat 20·48, Ahmednagar 20·11, Panch Maháls 20·11, Sátára 19·68, Sholápur 19·50, Thána 18·26, Násik 17·97, Hyderabad 17·60, and Kánara 17·33. The Presidency rate being 17·10 against 19·10 in the previous year and 17·27 the decennial mean.

By Collectorates.

Comparison of death-rates in Towns and Cantonments with those of the zillas in which they are situated.

87. Form No. 6, in the Appendix, shows that the highest death-rate from fever is reported from Viramgám, where it attained the enormously high rate of 30·70 per 1,000 of population against a zilla rate of 20·76. In the 13 towns and cantonments situated in 9 different Collectorates —*viz.*, Sholápur and Bársi in the Sholápur Collectorate, Nadiád and Kapadvanj in Kaira, Dohad in the Panch Maháls, Ahmedabad and Viramgám in Ahmedabad, Karáchi and Hyderabad towns in the Collectorates of the same names, Umarkot in the Thar and Párkar, Shikárpur

and Lárkhána in the Shikárpur Collectorate, and Jacobabad Town and Cantonment on the Upper Sind Frontier,—the death-rate from fever is higher than the average death-rate of the zilla.

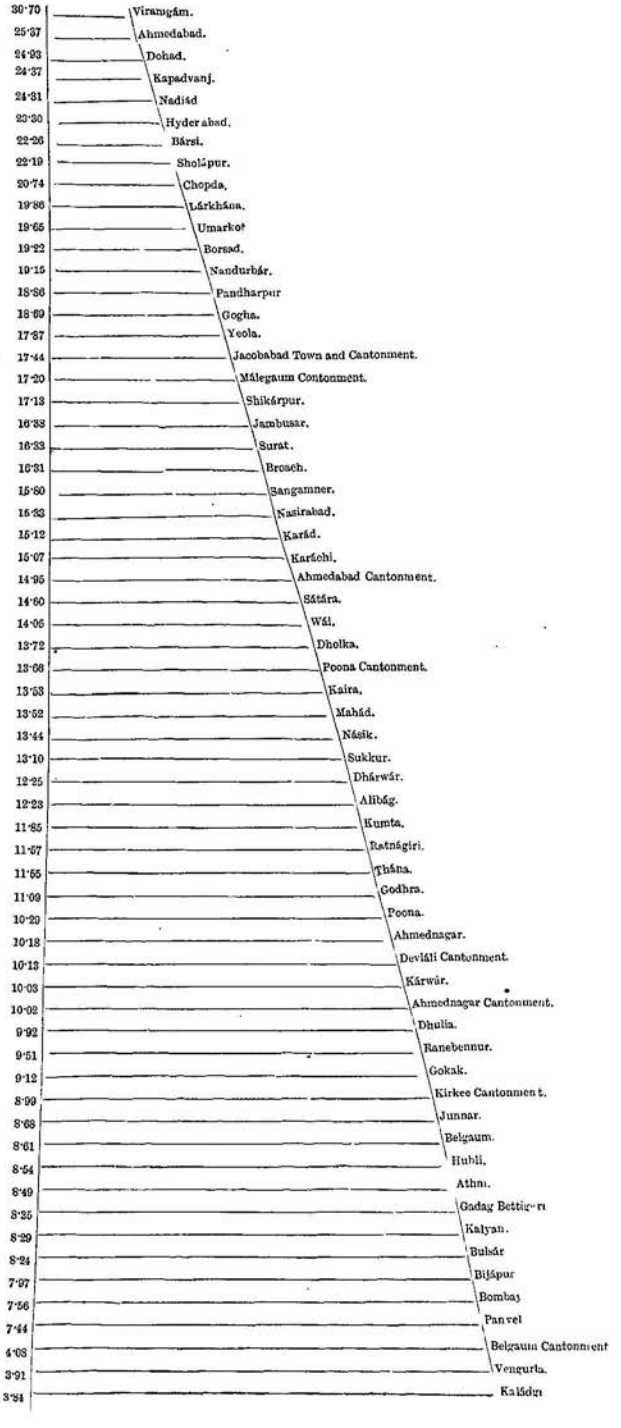
Deaths by Months.

88. The table in the margin shows the monthly distribution of these deaths as compared with the mean and the corresponding months of 1885. In January, February, and April the deaths from fever were both above the mean and the corresponding months in 1885. In March and from May to September they were below the number of deaths registered in the previous year, but above the mean. In October, November, and December they were both below the mean and the previous year. The maximum mortality from fever took place in the month of December, when 26,036 deaths were reported, and the minimum in the month of June, when 19,499 deaths from this cause were recorded.

Months.	Mean for 10 years 1876-1885.	1885.	1886.
January	23,806	23,497	25,311
February	20,740	21,697	22,060
March	21,970	23,550	22,623
April	20,916	22,062	22,193
May	20,831	23,229	22,084
June	19,451	23,751	19,499
July	22,195	26,767	22,239
August	25,269	30,171	25,799
September	25,100	29,346	25,733
October	26,102	32,027	23,308
November	28,838	29,904	24,565
December	26,992	28,236	26,036
Total ...	282,220	314,237	281,450

Fever Diagram.

89. The following diagram shows the death-rate from fever per 1,000 of population in the following towns and cantonments in the Presidency arranged in sequence from highest to lowest :—


30·70 Viramgám.
25·37 Ahmedabad.
24·93 Dohad.
24·37 Kapadvanj.
24·31 Nadiád
23·30 Hyderabad.
22·26 Bársi.
22·19 Sholápur.
20·74 Chopda.
19·86 Lárkhána.
19·65 Umarkot
19·22 Borsad.
19·15 Nandurbár.
18·86 Pandharpur
18·69 Gogha.
17·87 Yeola.
17·44 Jacobabad Town and Cantonment.
17·20 Málegaum Contonment.
17·13 Shikárpur.
16·33 Jambusar.
16·33 Surat.
16·31 Broach.
15·80 Sangamner.
15·33 Nasirabad.
15·12 Karád.
15·07 Karíchi.
14·95 Ahmedabad Cantonment.
14·60 Sátára.
14·05 Wál.
13·72 Dholka.
13·66 Poona Cantonment.
13·53 Kaira.
13·52 Mahád.
13·44 Násik.
13·10 Sukkur.
12·25 Dhárwár.
12·23 Alibág.
11·85 Kumta.
11·57 Ratnágiri.
11·55 Thána.
11·09 Godhra.
10·20 Poona.
10·18 Ahmednagar.
10·13 Devlálí Cantonment.
10·03 Kárwár.
10·02 Ahmednagar Cantonment.
9·92 Dhulia.
9·51 Ranebennur.
9·12 Gokak.
8·99 Kirkee Cantonment.
8·68 Junnar.
8·61 Belgaum.
8·54 Hubli.
8·49 Athni.
8·35 Gadag Bettigeri
8·29 Kalyan.
8·24 Bulsár
7·97 Bijápur
7·56 Bombay
7·44 Panvel
4·03 Belgaum Cantonment
3·91 Vengurla.
3·34 Kaládgi

Fever mortality classified by Tálukas.

90. The following statement shows the number of tálukás throughout the Presidency arranged according to the death-rate from fevers. In 1, *viz.*, Vágra Táluka of Broach Collectorate, it reached the excessive rate of 31·00 per 1,000. The details will be found in the táluka returns of the preceding section.

Ratio per 1,000 of Population between	30 and 35.	25 and 30.	20 and 25.	15 and 20.	10 and 15.	5 and 10.	Below 5.
Number of tálukás	1	19	59	81	49	12	1

BOWEL-COMPLAINTS.

Deaths from Bowel-complaints by Sexes.

91. During 1886, bowel-complaints caused the deaths of 20,275 males and of 16,337 females, or a total of 36,612 persons, against 45,056 in 1885 and a decennial mean of 36,093.

Deaths since 1875.

92. The number of deaths reported from bowel-complaints in each year since 1875 is as follows:—

Years.	Number of Deaths from Bowel-complaints.	Years.	Number of Deaths from Bowel-complaints.
1875	33,650	1881	30,342
1876	33,683	1882	28,353
1877	60,257	1883	35,292
1878	41,165	1884	35,983
1879	26,349	1885	45,056
1880	24,452	1886	36,612
Total for 6 years ...	219,556	Total for 6 years ...	211,638
Mean ...	36,593	Mean ...	35,273

Deaths by Districts and Collectorates.

93. The following table shows these deaths arranged by Districts and Collectorates:—

Districts.	Number.	Collectorates	Population according to Census of 1881.	Deaths from Bowel-complaints in: Mean for 10 years from 1876 to 1885.	Ratio per 1,000 of Population.	1885.	Ratio per 1,000 of Population on Census of 1881.	1886.	Ratio per 1,000 of Population on Census of 1881.
Western Registration District.	1	Khándesh	1,237,231	4,163	3·68	5,710	4·61	5,300	4·28
	2	Násik	781,206	1,915	2·56	3,364	4·31	1,864	2·39
	3	Thána	807,367	288	0·37	548	0·68	419	0·52
	4	Bombay	773,196	2,123	2·99	1,520	1·97	1,485	1·89
	5	Kolába	482,830	228	0·49	333	0·69	363	0·75
Central Registration District.	6	Ahmednagar	751,228	2,017	2·65	2,469	3·28	1,873	2·49
	7	Poona	900,621	1,593	1·78	2,149	2·39	1,354	1·50
	8	Sholápur	582,487	1,746	2·68	1,699	2·92	1,097	1·88
	9	Sátára	1,062,350	2,844	2·68	3,435	3·22	2,444	2·30
	10	Ratnágiri	997,090	1,402	1·39	1,275	1·28	1,772	1·75
Southern Registration District.	11	Belgaum	864,014	3,599	3·99	5,204	6·09	4,352	5·04
	12	Dhárwár	882,907	4,731	5·06	5,659	6·41	4,792	5·43
	13	Bijápur	638,493	1,651	2·27	1,892	2·92	1,505	2·36
	14	Kánara	421,840	1,093	2·68	840	1·99	748	1·77
Eastern Gujarát Registration District.	15	Surat	614,198	1,545	2·53	1,881	3·06	1,789	2·92
	16	Broach	326,930	607	1·79	690	2·13	535	1·63
	17	Kaira	804,900	2,199	2·77	3,205	3·98	2,454	3·01
	18	Panch Mahále	245,479	303	1·24	144	0·56	109	0·43
	19	Ahmedabad	856,324	1,514	1·80	2,404	2·81	1,890	2·21
Sind Registration District.	20	Karáchi	478,688	159	0·35	288	0·60	206	0·43
	21	Hyderabad	754,624	85	0·12	97	0·13	104	0·14
	22	Thar and Párkar	303,344	27	0·14	54	0·12	30	0·15
	23	Shikárpur	852,986	200	0·26	207	0·24	138	0·16
	24	Upper Sind Frontier	124,181	34	0·32	52	0·42	39	0·31

ABSTRACT.

Western Registration District	4,081,830	8,717	2·27	11,475	2·81	9,411	2·31
Central do. do.	4,293,776	9,615	2·19	11,018	2·57	8,540	1·99
Southern do. do.	2,807,254	11,074	3·72	13,565	4·83	11,397	4·05
Eastern Gujarát Registration District	2,857,731	6,173	2·18	8,330	2·91	6,747	2·36
Sind Registration District	2,413,823	514	0·22	668	0·28	517	0·21
Presidency ..	16,454,414	36,093	2·21	45,056	2·73	36,612	2·23

The Southern Registration District heads the list with the high ratio of 4·06 against 4·83 in 1885 and 3·72 the decennial mean. Gujarát comes next with a ratio of 2·36, and next to it is the Western Registration District 2·31, and following it is the Central Registration District 1·99, and the last of all Sind with a rate of 0·21 per 1,000. In the Presidency the rate was 2·23 against 2·73 in the previous year and a decennial mean of 2·21. All districts show a decrease in the death ratios. In Collectorates the highest ratios were recorded in Dhárwár 5·43, Belgaum 5·04, and Khándesh 4·28; and the lowest 0·15 in Thar and Párkar and 0·14 in Hyderabad.

By Districts.

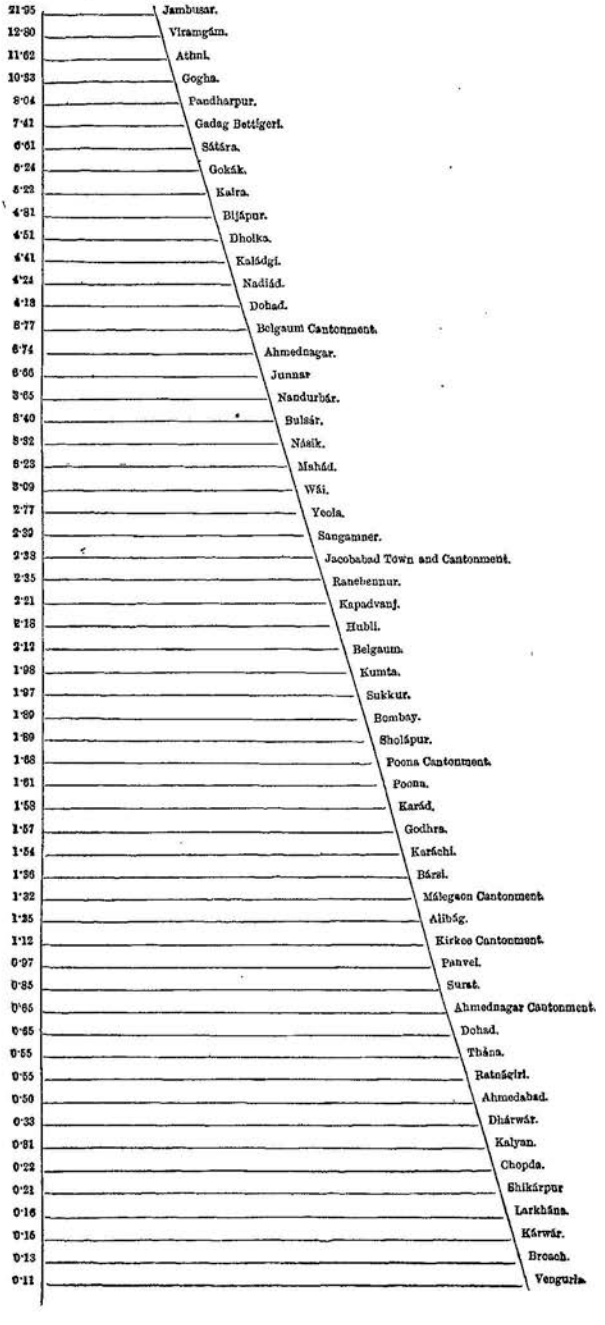
By Collectorates.

94. In Khándesh and Ratnágiri the death-rates from bowel-complaints are lower in the towns than in the rural registration circles. The extremely high rate of 21·95 per 1,000 is reported from the town of Jambusar, in the Broach Collectorate. Viramgám and Athni have also very high rates—12·80 and 11·62 respectively, whilst the following towns have also high rates:—Gogha 10·33, Pandharpur 8·04, Gadag Bettigeri 7·41, Sátára 6·41, Gokák 5·24, and Kaira 5·22.

Comparison of death-rates in Towns and Cantonments with those of the Zillas in which they are situated.

95. The following diagram shows the death-rate from bowel-complaints in each town and cantonment in the Presidency arranged in sequence from highest to lowest. In the following towns and cantonments no deaths from bowel-complaints were registered during the year:—Nasirabad, Devláli Cantonment, Borsad, Ahmedabad Cantonment, Hyderabad, and Umarkot.

Bowel-complaints Diagram.


21·95 Jambusar.
12·80 Viramgám.
11·62 Athni.
10·33 Gogha.
8·04 Pandharpur.
7·41 Gadag Bettigeri.
6·61 Sátára.
6·24 Gokák.
5·22 Kaira.
4·81 Bijápur.
4·51 Dholka.
4·41 Kaládgi.
4·24 Nadiád.
4·18 Dohad.
3·77 Belgaum Cantonment.
3·74 Ahmednagar.
3·66 Junnar
3·65 Nandurbár.
3·40 Bulsár.
3·32 Násik.
3·23 Mahád.
3·09 Wái.
2·77 Yeola.
2·39 Sanganner.
2·33 Jacobabad Town and Cantonment.
2·35 Ranebennur.
2·21 Kapadvanj.
2·18 Hubli.
2·12 Belgaum.
1·98 Kumta.
1·97 Sukkur.
1·89 Bombay.
1·69 Sholápur.
1·68 Poona Cantonment.
1·61 Poona.
1·53 Karád.
1·57 Godhra.
1·54 Karáchi.
1·36 Bársi.
1·32 Málegaon Cantonment.
1·25 Alibág.
1·12 Kirkee Cantonment.
0·97 Panvel.
0·85 Surat.
0·65 Ahmednagar Cantonment.
0·65 Dohad.
0·55 Thána.
0·55 Ratnágiri.
0·50 Ahmedabad.
0·33 Dhárwár.
0·31 Kalyan.
0·22 Chopda.
0·21 Shikárpur
0·16 Larkhána.
0·16 Kárwár.
0·13 Broach.
0·11 Vengurla.

Deaths by Months.

96. The table in the margin shows the monthly distribution of these deaths as compared with the mean and the corresponding months of 1885. During each month the deaths from bowel-complaints were less than in 1885; but in January, March to August, and December they were above the decennial mean. The maximum mortality occurred in August and the minimum in February.

Months.	Mean for 10 years, 1876 to 1885.	1885.	1886.
January ...	2,602	3,035	2,992
February ...	2,536	2,788	2,489
March ...	2,108	2,831	2,549
April ...	2,313	2,767	2,612
May ...	2,383	3,132	2,788
June ...	2,651	3,695	2,818
July ...	2,883	4,580	3,537
August ...	3,662	5,377	4,126
September ...	4,483	4,840	3,517
October ...	4,159	4,734	3,141
November ...	3,425	3,945	2,919
December ..	2,888	3,332	3,124
	36,093	45,056	36,612

INJURIES.

Deaths from Injuries.

97. During 1886, 3,297 males and 2,395 females, or a total of 5,692 persons met with violent deaths. The mortality from these causes exceeds by 115 that reported in 1885, when 5,577 deaths were recorded. Of the 5,692 deaths, 2,434 were caused by drowning, 1,164 resulted from snake-bites, 474 from wounds, 215 by hanging, 173 by poisoning, 85 from attacks by wild beasts, and 1,147 from causes not specified.

Deaths since 1875.

98. The number of deaths registered from injuries in each year since 1875 was as follows :—

Years.	Number of Deaths from Injuries.	Years.	Number of Deaths from Injuries.
1875 ...	6,217	1881 ...	5,950
1876 ...	5,928	1882 ...	5,913
1877 ...	7,539	1883 ...	5,978
1878 ...	7,550	1884 ...	5,570
1879 ...	7,107	1885 ...	5,577
1880 ...	6,082	1886 ...	5,692
Total for 6 years. ...	40,423	Total for 6 years ...	34,680
Mean ...	6,737	Mean ...	5,780

Deaths from injuries in 1885 and 1886 arranged by sexes.

99. The results of the two last years, arranged by sex, are shown in the following table :—

	1885.			1886.		
	Males.	Females.	Total.	Males.	Females.	Total.
Drowning ...	1,102	1,325	2,427	1,145	1,289	2,434
Poisoning ...	92	70	162	119	54	173
Hanging ...	131	105	236	123	92	215
Wounding ...	352	150	502	326	148	474
Wild beasts ...	86	24	110	58	27	85
Snake-bites ...	698	402	1,100	752	412	1,164
Other causes ...	697	343	1,040	774	373	1,147
	3,158	2,419	5,577	3,297	2,395	5,692

It will be seen, from the above table, that during 1886, under drowning, poisoning, snake-bites, and other causes, there is a total increase of 189 deaths; whilst under hanging, wounding, and injuries caused by wild beasts there is an aggregate decrease of 74 deaths as compared with the results of 1885.

Deaths by Districts and Collectorates.

100. The next table gives the deaths from injuries for each District and Collectorate for 1885 and 1886 and the mean for the previous 10 years. The number of deaths during the year in 12 Collectorates is more, in 1 the same, and in 11 less than the previous year. The highest number of deaths was recorded in Hyderabad, and the lowest on the Upper Sind Frontier.

Districts.	No.	Collectorates.	Population according to Census of 1881.	Deaths from Injuries in: Mean for 10 years from 1876 to 1885.	Ratio per 1,000 of Population.	1885.	Ratio per 1,000 of Population on Census of 1881.	1886.	Ratio per 1,000 of Population on Census of 1881.
Western Registration District.	1	Khándesh	1,237,231	288	0·25	243	0·19	270	0·22
	2	Násik	781,206	161	0·21	158	0·20	135	0·17
	3	Thána	807,367	388	0·50	377	0·47	448	0·55
	4	Bombay	773,196	332	0·47	305	0·39	372	0·48
	5	Kolába	482,830	165	0·36	163	0·34	160	0·33
Central Registration District.	6	Ahmednagar	751,228	173	0·23	119	0·16	96	0·13
	7	Poona	900,621	323	0·36	387	0·43	318	0·35
	8	Sholápur	582,487	207	0·32	133	0·23	145	0·25
	9	Sátára	1,062,350	380	0·36	274	0·26	246	0·23
	10	Ratnágiri	997,090	404	0·40	317	0·32	220	0·22
Southern Registration District.	11	Belgaum	864,014	353	0·39	260	0·30	247	0·29
	12	Dhárwár	882,907	366	0·39	265	0·30	272	0·31
	13	Bijápur	638,493	305	0·42	159	0·25	167	0·25
	14	Kánara	421,840	226	0·55	240	0·57	212	0·50
Eastern Gujarát Registration District.	15	Surat	614,198	266	0·44	258	0·42	285	0·46
	16	Broach	326,930	127	0·38	130	0·40	115	0·35
	17	Kaira	804,800	334	0·42	340	0·42	333	0·41
	18	Panch Mahále	258,479	113	0·45	115	0·45	113	0·44
	19	Ahmedabad	856,324	230	0·27	238	0·28	260	0·30
Sind Registration District.	20	Karáchi	478,688	278	0·62	249	0·52	311	0·65
	21	Hyderabad	734,624	490	0·62	400	0·53	452	0·57
	22	Thar and Párkar	203,344	87	0·45	104	0·51	111	0·55
	23	Shikárpur	852,986	319	0·39	315	0·36	376	0·44
	24	Upper Sind Frontier	124,181	35	0·33	28	0·23	28	0·23

ABSTRACT.

Western Registration District	4,081,830	1,334	0·35	1,246	0·31	1,335	0·33
Central do. do.	4,293,776	1,487	0·34	1,230	0·29	1,025	0·23
Southern do. do.	2,807,254	1,250	0·42	924	0·33	898	0·32
Eastern Gujarát Registration District	2,857,731	1,070	0·37	1,081	0·39	1,106	0·39
Sind Registration District	2,413,823	1,179	0·51	1,096	0·45	1,278	0·63
Presidency ..	16,454,414	6,320	0·39	5,577	0·34	5,692	0·35

Death-rate in Towns and Cantonments as compared with the Collectorates.

101. Form No. 6 in the Appendix shows the ratios of town and cantonment circles as compared with the ratios of the Collectorate in which they are situated, and it will be seen from it that in 38 town and cantonment circles the rate of mortality from injuries is higher than in the Collectorates in which they are situated. The highest ratio, 2·53, took place in Kirkee Cantonment in the Poona Collectorate, and the lowest, 0·05, in the town of Dhulia in the Khándesh Collectorate. In 3 towns, *viz.*, Vengurla, Kaládgi, and Umarkot, and in 2 cantonments, *viz.*, Ahmednagar and Jacobabad town and cantonment, no deaths were reported from injuries during the year.

Snake-bites by Months.

102. The monthly distribution of deaths from snake-bites are given in the next table for each year from 1881 to 1886 inclusive. The deaths in 1886 were, as usual, most numerous during the rainy season :—

Months.	Years.						
	1881.	1882.	1883.	1884.	1885.	Mean for 5 years.	1886.
January	39	35	34	31	23	32	29
February	34	39	28	27	13	28	22
March	55	47	44	41	37	45	30
April	55	63	53	58	48	55	55
May...	95	102	95	79	76	89	93
June	162	149	155	145	148	152	158
July...	191	168	179	180	176	179	156
August	165	189	226	179	176	187	161
September	161	211	181	139	160	170	180
October	128	166	133	117	122	133	136
November	80	71	62	55	80	70	93
December	44	37	25	26	41	36	51
	1,209	1,277	1,215	1,077	1,100	1,176	1,164

Snake-bites by Collectorates.

103. The next statement shows the deaths by localities, and, as usual, the highest number 187 is from Hyderabad, Thána follows with 163, Karáchi with 88. On the Upper Sind Frontier only 4 deaths were recorded. The total for the Presidency during the year is more by 64 than in the previous year :—

Collectorates.	Years.						
	1881.	1882.	1883.	1884.	1885.	Mean for 5 years.	1886.
Khándesh	44	25	24	31	27	30	15
Násik	21	13	14	8	12	14	20
Thána	114	148	120	84	116	116	163
Bombay	2	5	6	1	2	3	8
Kolába	32	40	26	24	39	32	38
Ahmednagar	17	18	14	16	5	14	7
Poona	21	31	28	38	50	34	37
Sholápur	9	10	7	8	11	9	10
Sátára	44	46	49	59	54	50	42
Ratnágiri	164	149	112	120	108	131	75
Belgaum	43	34	30	42	43	38	33
Dhárwár	36	24	27	28	22	27	27
Bijápur	32	33	35	22	14	27	15
Kánara	27	22	12	19	18	20	34
Surat	54	49	48	42	36	46	43
Broach	26	35	28	16	21	25	17
Kaira	60	61	77	70	49	64	62
Panch Maháls	28	29	36	34	28	31	40
Ahmedabad	31	64	65	40	51	50	57
Karáchi	99	87	56	63	72	76	88
Hyderabad	186	190	212	151	162	180	187
Thar and Párkar ...	42	78	78	55	66	64	64
Skikárpur	74	77	107	96	89	89	78
Upper Sind Frontier ...	3	9	4	10	5	6	4
	1,209	1,277	1,215	1,077	1,100	1,176	1,164

Details of Injuries.

104. In the following table the deaths from injuries are detailed under specified headings, and it will be seen that of the 2,434 deaths by drowning, 406 were suicidal, 1,844 accidental, and 184 are entered as otherwise. This heading means that, when the return was submitted, these deaths could neither be pronounced suicidal nor accidental. There were 1,127 deaths by drowning in wells against 1,222 in 1885. Of the 708 suicidal deaths, 406 were the result of drowning, 94 of taking poison, 191 of hanging, and 17 of self-inflicted wounds. This large annual destruction of human life by drowning in wells seems to me, if I may respectfully say so, to demand the active interference of Government, with a view to some steps being taken to

prevent it. During my late inspection of Bijápur I was much struck with the old wells which have recently been discovered among the ruins of that ancient City, and it was most interesting to see how thoroughly well the Mahomedans under the Adil Shahi Dynasty understood the necessity of preserving the drinking water in the wells from accidental pollution by air-borne impurity, such as leaves, dust, jowári stalks, &c., as well as the importance of protecting it from the action of the sun light, which not only attracts insects, but favours the growth of vegetable life All these old wells were domed over: there was only a small hole covered with a stone left on the top of the dome through which the water was drawn from the well by means of a lota.

Suggestion for prevention of deaths from drownings in wells.

This form of construction is, without any doubt, the best which could be devised for preserving the purity of the water, whilst, if it were generally adopted, it would prevent the very large loss of life which year by year is brought to notice in the Sanitary Commissioner's annual report In my opinion, Government would confer a very great boon on the people of this Presidency, even if it were necessary to legislate on the subject, if it were to insist on this form of construction being carried out.

If wells are domed over, it would not only be possible, but most desirable, that the water should be lifted by means of a pump, which, now that the use of leathern washers has been discarded in favour of washers made from India rubber, would no longer offend the prejudices of Hindus, and might safely be used without hesitation by the most orthodox Brahmin.

No.	Names of Collectorates.	2 Drowning. Suicidal. Well. Male.	Female.	Total.	Tank. Male.	Female.	Total.	Otherwise. Male.	Female.	Total.	Accidental. Well. Male.	Female.	Total.	Tank. Male.	Female.	Total.	Otherwise. Male.	Female.	Total.	*Otherwise. Well. Male.	Female.	Total.	Tank. Male.	Female.	Total.	Otherwise. Male.	Female.	Total.
1	Khándesh	10	13	23	1	2	3	..	2	2	26	36	62	5	2	7	24	16	40	2	5	7	..	..	..	7	2	9
2	Násik	1	3	4	..	..	..	..	1	1	6	15	21	..	2	2	12	6	18	1	2	3	..	..	..	3	1	4
3	Thána	2	21	23	..	..	..	1	2	4	11	43	54	9	4	13	43	15	58	2	2	4	..	..	..	1	4	5
4	Bombay	14	13	27	7	3	10	3	..	3	7	3	10	14	2	16	15	4	19	1	1	2	7	4	11	5	1	6
5	Kolába	2	2	4	..	1	1	..	1	1	7	21	28	6	2	8	15	16	31	..	1	1	..	..	..	2	1	3
6	Ahmednagar ..	2	11	13	..	1	1	..	1	1	6	13	19	2	2	4	..	6	6	..	1	1	..	..	..	6	2	8
7	Poona	6	14	20	..	..	..	2	1	3	28	43	71	6	..	6	34	29	63	1	2	3	..	..	..	3	2	5
8	Sholápur	3	8	11	2	..	2	..	1	1	13	32	45	5	2	7	3	3	6	1	4	5	..	..	..	6	2	8
9	Sátára	3	17	20	1	1	2	..	6	6	32	52	84	..	..	..	12	16	28	1	2	3	2	..	2	1	4	5
10	Ratnágiri	1	2	3	..	1	1	..	2	2	6	14	20	9	5	14	10	11	21	1	2	3	..	2	2	2	1	3
11	Belgaum	3	26	29	1	1	2	1	5	6	33	39	72	3	1	4	13	10	23	..	3	3	1	..	1	1	1	2
12	Dhárwár	13	36	49	2	3	5	..	1	1	16	31	47	12	9	21	9	4	13	1	3	4	1	..	1	1	2	3
13	Bijápur	1	17	18	..	..	..	1	1	2	13	35	48	10	3	13	7	6	13	2	..	2	..	..	..	3	1	4
14	Kánara	2	11	13	..	1	1	..	1	1	9	14	23	10	6	16	23	14	37	1	..	1	..	..	..	5	6	11
15	Surat	4	22	26	..	1	1	2	..	2	8	24	32	4	2	6	40	15	55	1	..	1	..	..	..	2	2	4
16	Broach	2	3	5	1	2	3	..	..	..	3	16	19	6	5	11	10	..	10	..	..	..	..	..	..	..	..	..
17	Kaira	8	15	23	..	2	2	..	..	..	13	26	39	22	17	39	5	6	11	1	3	4	..	..	..	2	2	4
18	Panch Mahále ..	1	2	3	..	..	..	..	..	..	1	8	9	1	..	1	1	1	2	..	1	1	..	..	..	..	..	..
19	Ahmedabad ..	4	11	15	..	1	1	..	..	..	11	28	39	17	12	29	12	5	17	1	1	2	..	..	..	..	..	..
20	Karáchi	..	..	..	1	..	1	1	..	1	2	1	3	33	18	51	37	21	58	..	..	..	1	..	1	7	10	17
21	Hyderabad	..	1	1	1	1	2	..	..	..	8	1	9	57	32	89	21	19	40	3	..	3	..	1	1	1	..	1
22	Thar and Párkar ..	..	..	..	..	..	..	..	..	..	3	3	6	7	3	10	4	..	4	..	1	1	..	..	..	..	..	..
23	Shikárpur	..	1	1	..	..	..	..	..	..	9	5	14	20	15	35	54	33	87	..	1	1	1	..	1	7	1	8
24	Upper Sind Frontier.	..	..	..	..	..	..	..	..	..	2	..	2	2	1	3	1	2	3	..	..	..	..	..	..	..	1	1
	Total ..	82	249	331	17	21	38	12	25	37	273	503	776	260	146	406	405	258	663	20	35	55	13	7	20	63	46	109

No.	3 Poisoning. Suicidal. Male.	Female.	Total.	Accidental. Male.	Female.	Total.	*Otherwise. Male.	Female.	Total.	4 Hanging. Suicidal. Male.	Female.	Total.	Accidental. Male.	Female.	Total.	5 Wounding. Suicidal. Male.	Female.	Total.	Accidental. Male.	Female.	Total.	*Otherwise. Male.	Female.	Total.	6 Wild Beasts. Male.	Female.	Total.	7 Snake-bite. Male.	Female.	Total.	8 Other Causes. Male.	Female.	Total.	9 Total. Male.	Female.	Total.
1	3	..	3	4	..	4	2	1	3	3	..	3	1	..	1	..	1	1	12	7	19	9	3	12	5	3	8	8	7	15	36	12	48	158	112	270
2	1	..	1	1	..	1	..	..	..	4	1	5	2	..	2	1	..	1	9	9	18	7	6	13	..	..	..	11	9	20	12	8	20	71	64	135
3	2	1	3	..	..	..	..	..	..	15	2	17	..	1	1	2	..	2	15	6	21	6	7	13	3	1	4	105	58	163	48	15	63	266	182	448
4	22	11	33	17	3	20	1	1	2	3	..	3	1	..	1	..	1	1	3	..	3	2	..	2	..	..	..	6	2	8	132	63	195	260	112	372
5	..	1	1	..	..	..	..	..	..	2	1	3	1	..	1	..	..	..	8	2	10	4	5	9	..	..	..	23	15	38	13	8	21	83	77	160
6	2	2	4	1	..	1	2	..	2	1	..	1	2	..	2	..	..	..	2	..	2	..	1	1	1	2	3	4	3	7	12	8	20	43	53	96
7	17	7	24	9	3	12	4	..	4	2	..	2	..	1	1	1	..	1	10	4	14	3	1	4	2	..	2	17	20	37	28	18	46	173	145	318
8	1	1	2	1	2	3	..	..	..	5	..	5	..	..	..	..	..	..	4	1	5	..	3	3	..	2	2	4	6	10	22	8	30	70	75	145
9	1	..	1	1	..	1	..	..	..	6	..	6	1	..	1	..	..	..	9	3	12	2	2	4	1	..	1	20	22	42	20	7	27	113	133	246
10	1	..	1	2	2	4	..	..	..	2	2	4	..	..	..	..	..	..	6	..	6	1	..	1	2	2	4	44	31	75	36	19	55	123	97	220
11	..	..	..	..	..	..	..	..	..	7	5	12	4	2	6	..	..	..	17	7	24	2	5	7	..	1	1	21	9	33	17	5	22	127	120	247
12	1	..	1	..	..	..	..	..	..	13	8	21	..	..	..	..	1	1	26	9	35	6	7	13	4	1	5	16	11	27	17	8	25	138	134	272
13	1	2	3	..	..	..	1	2	3	4	9	13	..	1	1	..	..	..	8	7	15	6	5	11	1	..	1	10	5	15	3	2	5	71	96	167
14	..	..	..	..	..	..	..	..	..	6	6	12	2	..	2	..	..	..	36	2	38	2	1	3	3	1	4	16	18	34	11	5	16	126	86	212
15	3	..	3	1	..	1	..	..	..	5	..	5	..	..	..	..	..	..	10	2	12	7	..	7	4	6	10	24	19	43	53	24	77	168	117	285
16	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	3	4	5	..	5	1	2	3	8	9	17	25	12	37	62	53	115
17	4	5	9	1	..	1	1	..	1	4	11	15	..	..	..	..	..	..	5	3	8	7	5	12	2	1	3	30	32	62	76	26	102	179	154	333
18	..	..	..	..	..	..	..	..	..	4	5	9	..	..	..	..	..	..	..	..	..	7	2	9	3	..	3	17	23	40	21	15	36	56	57	113
19	2	1	3	1	1	2	1	..	1	6	10	16	2	..	2	1	..	1	12	8	20	4	3	7	..	..	..	33	24	57	25	23	48	132	128	260
20	..	..	..	2	1	3	..	2	2	3	5	8	..	1	1	1	..	1	5	2	7	6	..	6	9	1	10	66	22	88	40	13	53	214	97	311
21	..	..	..	..	..	..	..	..	..	3	3	6	..	2	2	2	2	4	13	3	16	6	1	7	8	3	11	151	36	187	42	31	73	316	136	452
22	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	1	2	3	..	3	52	12	64	11	9	20	82	29	111
23	1	..	1	..	..	..	..	..	..	9	14	23	..	..	..	2	..	2	2	1	3	4	6	10	6	1	7	60	18	78	70	30	100	249	127	376
24	..	..	..	..	..	..	..	..	..	..	2	2	..	..	..	2	..	2	..	..	..	3	..	3	..	..	..	3	1	4	4	4	8	17	11	28
Total ..	62	32	94	41	12	53	16	10	26	107	84	191	16	8	24	12	5	17	214	79	293	100	64	164	58	27	85	752	412	1,164	74	373	1,537	3,297	2,395	5,692

* The term "Otherwise" is used, because when the Return is submitted, the Law may not have pronounced the Cases to be "Homicidal."

OTHER CAUSES.

Deaths from other Causes by Sexes.

105. The recorded deaths, from causes other than those specified, numbered 56,388, 29,045 of which occurred among males and 27,343 among females. The total for 1885 was 68,788 : so for this year there is a decrease of 12,400. In the following table, these deaths are shown for each District and Collectorate; and the mean for the last 10 years, the number and ratios per 1,000 of population, and the numbers and ratios for 1885 and 1886 are also given :—

Districts.	No.	Collectorates.	Population according to Census of 1881.	Deaths from other Causes. Mean for 10 years from 1876 to 1885.	Ratio per 1,000 of Population.	1885.	Ratio per 1,000 of Population on Census of 1881.	1886.	Ratio per 1,000 of Population on Census of 1881.
Western Registration District.	1	Khándesh..	1,237,231	873	0·77	1,123	0·91	830	0·67
	2	Násik	781,206	2,056	2·75	2,763	3·54	1,622	2·08
	3	Thána	807,367	1,700	2·25	1,971	2·44	1,242	1·54
	4	Bombay	773,196	11,853	16·72	12,615	16·32	12,097	15·65
	5	Kolába	482,830	1,472	3·18	1,521	3·15	1,307	2·71
Central Registration District.	6	Ahmednagar	751,228	2,878	3·76	3,576	4·76	2,915	3·88
	7	Poona	900,021	2,860	3·16	4,727	5·25	3,347	3·72
	8	Sholápur	582,487	3,845	5·91	2,424	4·16	1,581	2·71
	9	Sátára	1,062,350	3,150	2·95	5,021	4·73	3,637	3·42
	10	Ratnágiri	997,000	5,009	4·97	4,525	4·54	4,473	4·48
Southern Registration District.	11	Belgaum	864,014	8,471	9·40	6,053	7·01	4,880	5·65
	12	Dhárwár	882,907	6,397	6·33	5,784	6·55	4,441	5·03
	13	Bijápur	638,403	5,345	7·35	3,272	5·12	2,426	3·80
	14	Kánara	421,840	3,799	9·26	3,950	9·38	3,774	8·95
Eastern Gujarát Registration District.	15	Surat	614,198	1,345	2·69	1,590	2·59	1,519	2·47
	16	Broach	326,930	637	1·88	779	2·38	525	1·61
	17	Kaira	804,800	1,103	1·39	1,404	1·74	832	1·03
	18	Panch Mahále	255,479	330	1·33	106	0·41	92	0·36
	19	Ahmedabad	856,324	3,252	3·86	3,136	3·66	2,150	2·51
Sind Registration District.	20	Karáchi	478,638	1,149	3·55	1,178	2·46	1,456	3·04
	21	Hyderabad	754,624	615	0·83	750	0·99	703	0·93
	22	Thar and Párkar	203,344	147	0·77	179	0·88	138	0·67
	23	Shikárpur..	852,956	330	0·40	278	0·33	331	0·39
	24	Upper Sind Frontier	124,181	52	0·48	54	0·43	70	0·56

ABSTRACT.

Western Registration District	4,031,830	18,014	4·70	19,993	4·90	17,093	4·19
Central do. do.	4,293,776	17,722	4·04	20,273	4·72	15,953	3·72
Southern do. do.	2,807,254	24,012	8·07	19,068	6·70	15,621	5·53
Eastern Gujarát Registration District	2,857,731	6,967	2·46	7,015	2·45	5,118	1·79
Sind Registration District..	2,413,823	2,293	1·00	2,430	1·01	2,698	1·12
Presidency ..	1,64,54,414	69,008	4·22	68,788	4·18	56,388	3·43

Deaths since 1875.

106. The number of deaths registered from other causes in each year since 1875 is as follows :—

Years.	Number of Deaths from other Causes.	Years.	Number of Deaths from other Causes.
1875	65,679	1881	55,522
1876	63,882	1882	56,164
1877	1,38,426	1883	60,829
1878	75,642	1884	61,625
1879	59,467	1885	68,788
1880	49,736	1886	56,388

SECTION VII.

GENERAL HISTORY OF VACCINATION.

Preliminary.

107. In reviewing last year's report the Government of India in their letter No. 324, dated 29th September 1886, Home Department—Sanitary, make the following remark :—"If the probable number of births is estimated at 40 per mille of population, the number of children born during the year would be 1,024,621. Deducting from this the probable number of deaths, at 175 per mille, the number of children available for vaccination was 845,313. Of these it would appear that 562,748 were protected by vaccination, or at the rate of 66· per cent., which is a very creditable approach to the highest attainable results. This ratio is probably nearer the truth than that given by the Sanitary Commissioner, *viz.*, 77·05, which is calculated on actuals, a portion of which (vital statistics) refers to the calendar year, whilst another portion (vaccination) relates to the official year. It is not apparent, however, how the ratio 77·05 has been obtained. The number of successful primary vaccinations among infants under one year of age is shown, in Statement No. I., as 549,090, and in paragraph 105 of the report as 363,519. But the latter figures are not clearly understood." The ratio of 77·05 given in para. 105 of last year's annual report was obtained by multiplying 363,519, or the number of infants successfully vaccinated *in the 24 Collectorates*, during the year 1885-86 by 100 and by dividing the product by 471,822, *i. e.* the number of infants available for vaccination. This number was obtained by deducting the deaths under one year (100,609) from the births (572,431) recorded during the year 1885. As children are not usually vaccinated until 3 months after birth, there cannot be any great error in basing the calculations for the official year regarding infantile vaccinations on the vital statistics of the preceding calendar year. The difference between the figures given in para. 105 and in Statement No. I. is easily accounted for. Para. 105 deals with the vaccination and birth and death statistics among infants only as regards the 24 Collectorates in this Presidency, and does not include the Native States, from which no returns regarding births or deaths are received, whereas Statement No. I. gives the particulars *regarding vaccination alone*, not only in the 24 Collectorates, but in the Native States as well.

It will be observed that I have omitted from this Report the History of Vaccination, which has hitherto been given in great detail in the Appendix, but full information in a condensed form is given in the following section regarding the work of the year, and any one requiring further details can obtain them by referring to statements Nos. 1 and 2, which will be found in the Appendix. By adopting this course I have saved the cost of printing at least 36 or 37 pages of letter-press, and the repetition of tables, which seems to me to be an advantage.

Strength of the Department.

108. The strength of the Department during 1886-87 was :—

5 Deputy Sanitary Commissioners.
3 Superintendents of Vaccination.
31 Inspectors of Sanitation and Vaccination.
5 Assistant Superintendents of Vaccination.
29 Clerks and Kárkúns.
511 Vaccinators, or 10 more than in 1885-86.
524 Peons, or 3 more than in the previous year.

During the year there has been an increase of 8 local-fund vaccinators—3 for the Collectorate of Bijápur, 2 each for the Collectorates of Kolába and Ahmednagar, 1 for the Collectorate of Ahmedabad, besides a candidate vaccinator in the Panch Maháls. There are now only 4 vaccinators (1 in Broach and 3 in Karáchi) who have more than one rural circle to attend to, but in the Collectorates of Khándesh and Násik there are no paid candidate vaccinators as there are in other districts.

There has been an increase of 1 municipal vaccinator in the town of Rohri, but there is a corresponding decrease in the Southern Registration District, as the Nipáni municipal vaccinator ceased working in August 1885. Government have in their Resolutions Nos. 3033, 4010, and 1645, dated the 12th

April 1885, 22nd October 1885, and 7th May 1886, sufficiently disposed of the subject of the entertainment of special vaccinators in towns having a population of 10,000, and it is hoped that the several municipal boards will now find their way to make provision for the same.

The States of Kolhápur have entertained the services of 2 apprentice vaccinators, and the State of Lunáváda has engaged an additional vaccinator, whilst 1 vaccinator in Gudgeri (Miraj Junior) has ceased working since May, 1886; and in Western Gujarát, the services of a female vaccinator, entertained to visit the Courts of the Chiefs of Káthiáwár, were dispensed with from 1st October 1885, as the work performed was not in proportion to the expense incurred. Additional vaccinators are required for each of the States of Sunth, Kadána, and Khairpur.

Work amongst the Civil and Military Population.

109. The following table contrasts the work amongst the civil and military population during the year under report with that for 1885-86:—

Establishment.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.
In Civil Life.												
Itinerant	803,763	834,986	4,223 / 0·51	..	51,339	44,972	..	6,367 / 13·25	882,602	879,958	..	2,644 / 0·30
Dispensary	20,298	17,699	..	2,599 / 12·80	761	943	182 / 23·92	..	21,059	18,642	..	2,417 / 11·48
Total ..	851,061	852,685	4,223 / 0·50	2,599 / 0·31	52,099	45,915	182 / 0·35	6,367 / 13·06	903,661	898,600	..	5,061 / 0·56
In Army Life.												
Native Army ..	3,120	2,970	..	150 / 4·81	681	1,618	937 / 144·93	..	3,801	4,588	787 / 20·71	..
British Army ..	206	317	111 / 5·39	..	122	405	283 / 248·36	..	328	722	394 / 120·12	..
Total ..	3,326	3,287	111 / 3·34	150 / 4·51	803	2,023	1,220 / 151·93	..	4,129	5,310	1,181 / 28·60	..
Total for the whole Presidency.	854,387	855,972	4,334 / 0·51	2,749 / 0·32	53,403	47,938	1,402 / 2·63	6,367 / 12·95	907,790	903,910	1,181 / 0·13	5,061 / 0·56

855,972 persons were primarily vaccinated and 47,938 were re-vaccinated against 854,387 and 53,403 in 1885-86, showing a net increase of 1,585, or 0·19 per cent., under primary vaccinations, and a net decrease of 5,465, or 10·23 per cent., under re-vaccinations. The rate of decrease in primary vaccinations was very high amongst dispensaries, being 12·80 per cent., and in re-vaccinations it was very high amongst the itinerant vaccinators, being 13·25 per cent. The highest decrease (11·48 per cent.) under total operations was amongst Dispensaries. This decrease is due to the transfer of the vaccination work from the Medical Officers in charge of Dispensaries to the táluka vaccinators, under the orders of the Government of Bombay in their Resolution No. 3851, dated 1st November 1886. On the whole, there has been a slight decrease of 3,880; or, in other words, for every hundred persons operated on in 1885-86 the numbers for this year have been 99·57.

Primary vaccinations.

110. The following table shows the number of persons primarily vaccinated, as also the increase or decrease for the last ten years:—

Primarily vaccinated.	Years ending 31st March.										
	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.
Persons	732,184	670,055	561,909	586,501	642,505	729,323	702,206	826,965	802,207	854,387	855,972
Increase	..	..	..	24,532	56,004	86,818	62,883	34,759	..	52,180	1,585
Decrease	..	62,129	108,086	..	..	..	..	..	24,758	..	..

Infants successfully vaccinated in the 24 Collectorates.

111. The following table shows, for the last two years, the number of infants successfully vaccinated in the Presidency *exclusive of Native States.* The birth and death statistics are taken for the calendar year in calculating the number

available for vaccination, because infants are generally not vaccinated until three months after birth :—

Years.	Children vaccinated successfully.		Children available for Vaccination.	Births returned as having been registered.	Deaths registered among Children under one year.
	Those under 1 year.	Those between 1 and 6 years.			
1885-86	363,519	151,424	471,822	572,431	100,609
1886-87	361,720	149,190	489,302	581,553	92,251

This year the successful vaccinations fell short of the registered births *minus* deaths amongst those under one year old. Out of 489,302 infants available for vaccination, 361,720, or 73·93 per cent., have been protected. Last year the percentage was 77·05.

Results in primary vaccinations.

112. Out of 855,972 persons primarily vaccinated, 817,386 cases were successful, or 95·49 per cent., being only 0·27 per cent. less than in 1885-86. The number of unsuccessful cases was less than that in the preceding year, being 15,703 against 15,891. 1,872 persons were operated on a second time on account of the failure of the first operation, and in 24,755, or in 2,201 cases more than in the year 1885-86, the result was unknown.

Re-vaccinations.

113. During the year, 47,938 persons were re-vaccinated against 53,403 for 1885-86. In 50 instances the re-vaccinations were repeated, in 6,155 instances the results could not be ascertained, and in 10,888 the operations failed. The number of successful cases was 30,945, or 64·55 per cent., against 67·77 in the preceding year.

Total operations.

114. The total number of persons operated on was 903,910, and of these 848,331, or 93·85 per cent., were successful. In 1885-86 the percentage was 94·11. 1,922 persons were operated on more than once; the "unsuccessful" numbered 26,591, and the "unknown" cases were 30,910.

The details of the total number of persons operated on for the last two years by districts and circles of vaccination, together with the percentages of increase and decrease, are as follows :—

Districts and Circles.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.	1885-86.	1886-87.	Increase.	Decrease.
Western Registration District.	97,250	97,959	709 / 0·73	..	1,561	1,529	..	32 / 2·05	98,811	99,488	677 / 0·69	..
Presidency Circle.. ..	16,521	16,626	105 / 0·64	..	788	1,104	316 / 40·10	..	17,309	17,730	421 / 2·43	..
Central Registration District.	180,189	176,949	..	3,240 / 1·80	3,220	3,682	462 / 14·35	..	183,409	180,631	..	2,778 / 1·51
Southern Registration District.	140,308	129,925	..	10,383 / 7·73	5,222	6,606	1,384 / 26·50	..	146,030	136,531	..	9,499 / 6·50
Eastern Gujarát Registration District.	132,407	141,486	9,079 / 6·86	..	1,965	1,636	..	329 / 16·75	134,372	143,122	8,750 / 6·51	..
Western Gujarát Circle ..	104,864	106,986	2,122 / 2·03	..	18,922	11,422	..	7,500 / 39·64	123,786	118,408	..	5,378 / 4·34
Sind Registration District.	88,446	89,728	1,282 / 1·45	..	18,644	17,896	..	748 / 4·01	107,090	107,624	534 / 0·50	..
Baroda	68,019	70,011	1,992 / 2·93	..	2,070	1,438	..	632 / 30·53	70,089	71,449	1,360 / 1·94	..
Cutch	20,919	20,862	..	57 / 0·27	196	581	385 / 196·43	..	21,115	21,443	328 / 1·55	..
Aden, Muskat, Khelat and Bushire.	1,638	2,153	515 / 31·44	..	12	21	9 / 75·00	..	1,650	2,174	524 / 31·76	..
British Army	206	317	111 / 5·39	..	122	405	283 / 248·36	..	328	722	394 / 120·12	..
Native do.	3,120	2,970	..	150 / 4·81	681	1,618	937 / 144·93	..	3,801	4,588	787 / 20·71	..
Total ..	854,387	855,972	15,915 / 1·86	14,330 / 1·67	53,403	47,938	8,770 / 7·07	9,241 / 17·30	907,790	903,910	13,775 / 1·52	17,655 / 1·95

Priminary vaccinations by districts.

115. In primary vaccinations an increase of 15,915, or 1·86 per cent., took place in all the districts and circles. These vaccination units stand in the following sequence :—Aden, Muskat, Khelat and Bushire, Eastern Gujarát, British Army, Baroda, Western Gujarát, Sind, Western Registration District and the Presidency

Circle, where the rate is only 0·64 per cent. There was a considerable decrease of 14,330, or 1·67 per cent., amongst the Southern Registration District, Native Army, Central Registration District and Cutch.

Re-vaccinations by Districts.

116. In re-vaccinations an increase of only 3,776, or 7·07 per cent., is distributed over Native Army, Cutch, British Army, Aden, Muskat, Khelat and Bushire, Presidency Circle, Southern and Central Registration District, where the rate is 14·35 per cent. The decrease in other districts amounts to 9,241, or 17·30 per cent. These circles stand in the following sequence :—the Western Gujarát, Baroda, Eastern Gujarát, Sind, and Western Registration Districts: in the last named the rate was 2·05 per cent.

Total operations by Districts.

117. As regards operations, an increase of 13,775, or 1·52 per cent., is observed in British Army, Aden, Muskat, Khelat and Bushire, Native Army, Eastern Gujarát, Presidency Circle, Baroda, Cutch, Western Registration District and Sind, which has the lowest rate of 0·50 per cent., whilst a decrease of 17,655, or 1·95 per cent., is distributed over the Southern, Western Gujarát Circle and the Central Registration District, where it is only 1·51 per cent. The net decrease is 3,880, or 0·43 per cent.

Percentages of success by Districts.

118. The following table shows, by districts and circles, the percentages of success in primary vaccinations and re-vaccinations contrasted with those for the previous year :—

No.	Districts and Circles.	Percentages of Success of Primary Vaccinations.		Percentages of Success in Re-vaccinations.	
		1885-86.	1886-87.	1885-86.	1886-87.
1	Cutch Circle	99·00	99·07	71·43	86·92
2	Western Registration District	97·92	97·51	63·16	65·01
3	Eastern Gujarát Registration District	97·28	97·50	62·75	66·32
4	Presidency Circle	96·43	97·34	70·09	62·06
5	Baroda Circle	96·22	96·32	83·96	81·43
6	Sind Registration District	96·57	95·56	69·54	62·84
7	Southern Registration District	95·55	94·98	67·43	66·08
8	Central Registration District	95·06	94·89	65·71	66·09
9	Aden, Muskat, Khelat and Bushire	92·00	93·92	100·	95·24
10	Western Gujarát Circle	91·71	91·23	65·14	63·90
11	Native Army	92·83	89·97	72·42	58·90
12	British Army	91·26	88·33	79·51	45·19
	Average for the whole Presidency ..	95·76	95·49	67·77	64·55

In the "successful" primary vaccinations the percentages are lower than last year in 7 out of 12 districts and circles. On the whole there has been a slight decrease in the number and percentage of successful cases over those of last year.

Ratio to the total population protected.

119. The ratio to the total population of protection by successful primary operations is higher than last year in all the districts and circles, except Cutch and the Central and Southern Registration Districts. It is lowest in Western Registration District and Presidency Circle. In British and Native Territory it is respectively 31·65 and 32·39 against 31·94 per mille of population respectively in the previous year. On the whole, 31·91 persons of all ages per every 1,000 of population against 31·94 last year, 29·84 in 1884-85, 30·89 in 1883-84, 29·74 in 1882-83, and 27·54 in 1881-82, were primarily vaccinated successfully.

Agency.

120. In primary vaccinations the percentages are higher than in the preceding year, except in Local Fund and Native State establishments and in the British and Native Army. The highest percentage is 96·46 under Municipal and the lowest is 88·33 in the British Army. The next highest is 95·94 in Local Fund and the next lowest is 89·97 under Native Army. In re-vaccinations the lowest percentage is 39·02 in dispensaries, and the highest is 91·84 under Government.

Sex.

121. There were 440,325 males and 415,647 females primarily vaccinated. The re-vaccinated were respectively 28,968 and 18,970, and the totals of persons operated on were 469,293 males and 434,617 females. In primary vaccinations the sex percentages were respectively 51·44 and 48·56 against 51·55 and 48·45 last year; in re-vaccinations they are 60·43 and 39·57 against 59·38 and 40·62; and in total operations they are 51·92 and 48·08 against 52·01 and 47·99.

Race.

122. Of the total number primarily vaccinated, 4,241 were Christians, 651,479 Hindus, 131,528 Musalmáns, 2,034 Pársis, and 66,690 persons of Other Castes, and in all classes, except Hindus and Parsis, the numbers and percentages are higher than last year, being 0·49, 76·11, 15·37, 0·24, and 7·79.

Age.

123. The age details are compiled for three periods, *viz.*, under one year, between one and six, and above six years. The numbers under each period primarily vaccinated were respectively 585,745, 258,205, and 12,022, against 587,894, 253,927, and 12,566 during the preceding year.

Lymph.

124. The quality of the lymph in use throughout the year was good. There were 5 separate consignments of English lymph, 2 of 45 tubes each, for the Bombay District and 3 for Aden. The first Bombay consignment produced better results than the second one.

Animal vaccination.

Animal vaccination was carried on in Bombay, Poona City and Cantonment and Rájkot. The operation of inoculating heifers was generally successful. In Western Gujarát, animal vaccination was, in the commencement of the cold weather, carried on in Rájkot by inoculating 7 out of 8 heifers successfully, and the lymph was distributed among the vaccinators. Except in Bombay, where animal lymph only is used, and in Poona and Rájkot, where both animal and human lymph were in use, vaccination in all other places was carried on from arm to arm and with human lymph. Vaccination with animal lymph was also carried on in Bándora.

Expenditure.

125. The total expenditure on account of vaccination is shown in the following table :—

Establishment.	Total Expenditure.		Compared with the preceding year.
	1885-86.	1886-87.	+Increase. —Decrease.
	Rs. a. p.	Rs. a. p.	Rs. a. p.
Provincial	1,13,913 7 0	1,08,598 11 0	—5,314 12 0
Municipal	27,350 7 0	25,413 14 4	—1,936 8 8
Cantonment	749 0 0	662 5 6	—86 10 6
Local Fund	83,025 10 0	88,020 10 11	+4,995 0 11
Native State	55,554 5 6	57,480 13 9	+1,926 8 3
Total ..	2,80,592 13 6	2,80,176 7 6	—7,337 15 2
			+6,921 9 2
			—416 6 0

The total cost for the whole Presidency, including all charges, whilst the successful cases, excluding dispensaries and the Army, amounted to 827,370, was Rs. 2,80,176-7-6. The average cost for each successful case was annas 5-5, the same as last year. Excluding the pay of the supervising officers, the average cost of each successful case was annas 4-4, like last year.

Work of the supervising officers.

126. Taking together the work of all the Deputy Sanitary Commissioners, Superintendents of Vaccination, Assistant Superintendents of Vaccination and Inspectors of Sanitation and Vaccination, there were 4,235 encampments, 72,778¾ miles travelled in 7,942 days, and 323,136 children inspected in 13,225 villages. Out of every 100 persons operated on, 35·75 were this year inspected against 34·72 in the preceding year.

Inoculation.

Ill-effects by vaccination.

127. Inoculation was not reported to have been practised any where in the districts, and no instances were reported of any other disease but cow-pox having been communicated through vaccination.

Compulsory Vaccination Acts.

128. In Bombay the Compulsory Vaccination Act has been in force for nine years and in Karáchi for seven years, and in both places there has been, since the introduction of the Act, a considerable increase in the number of infants protected.

Aid from Civil, Revenue and Political Officers.

129. The Civil, Revenue, and Political Officers have rendered aid, when required, to all the officers of this Department.

SECTION VIII.

SANITARY WORKS—MILITARY.

130. The following table, compiled from the reports of the Executive Engineers in charge of military stations, shows the total amount spent on military works at each station in the Presidency during the year 1886:—

Stations.	Actual Outlay.	Stations.	Actual Outlay.
	Rs.		Rs.
Bombay	1,18,203	Asirghar	...
Colába		Málegaon	2,014
Thána	...	Ahmednagar	14
Devláli	45,252	Sirúr	...
Surat	...	Purandhar...	2,776
Baroda	3,697	Poona	7,786
Ahmedabad	8,509	Kirkee	6,647
Rájkot	...	Khandála	...
Bhúj	...	Sátára	...
Deesa	3,564	Kolhápur	1,195
Mount Abu	135	Belgaum	439
Nasirabad and Tárághar ...	466	Dhárwár	...
Neemuch...	3,199	Karáchi	26,783
Mehidpur...	...	Hyderabad (Sind)	2,598
Agar	143	Jacobabad	358
Indore	2,045	Aden	2,839
Mhow	9,771		

131. The actual outlay on military works amounted to Rs. 2,48,433 during the year 1886. Of this sum Rs. 1,18,203 were spent at Bombay and Colába, of which Rs. 83 were for additions and alterations to the water-supply arrangements at the Currency Building, Rs. 311 for providing 2 iron tanks for use at the Sassoon Dock, Bombay, and Rs. 7,930 on drainage in the officers' bungalows in the Marine Lines. At Devláli Rs. 45,252 were spent on military works. At Ahmedabad Rs. 8,509 were expended, of which Rs. 150 were for a wattle and daub wall to the cholera shed; Rs. 448 for asphalting the store-room and providing a small shed for filth receptacles in the new station hospital; Rs. 270 for providing jhamps to No. 32 harness-room and to the arched openings of gunshed, Royal Artillery; Rs. 463 for paving ditches which carry off the dirty water from the ablution room of the infantry barrack; and Rs. 4,402 for constructing the water tower and tank over the well in the compound of the new Station Hospital. At Deesa Rs. 3,553 for asphalting wards in the Station Hospital. At Mount Abu Rs. 121 for fixing moveable fanlights over the doors and windows of the Lawrence School Hospital. At Nasirabad Rs. 50 for providing 2 wire-netting doors to Government Bakery to improve ventilation; Rs. 33 for providing 2 ventilators in sergeant's rooms of European infantry barrack No. 54; Rs. 20 for building masonry and galvanized iron trough in cook-house attached to the Station Hospital, and Rs. 31 on temporary latrines in Rest Camp, and Rs. 332 for laying a 4" main up to the bázár diggie to supply water. At Neemuch Rs. 312 for constructing an open stone drain round the plinth of European infantry barrack No. 7 now used as a station hospital, Rs. 131 for cleaning out all the cantonment wells, and Rs. 355 on a temporary latrine. At Indore Rs. 2,045 were expended: of this sum Rs. 1,357 were for cleaning and deepening wells used by the troops, and Rs. 688 for cleaning and deepening wells used by the public. At Mhow Rs. 2,127 were for deepening wells, Rs. 1,880 for providing filter tanks to wells Nos. 35 and 28, Rs. 2,834 for constructing trap stone drains around Nos. 1, 2 and 3 European infantry barracks.

Rs. 433 on 2 new wells, Rs. 2,021 for deepening and improving 4 wells, Rs. 222 for constructing bunds at Patalpani, Rs. 171 for filling the filter tank, and Rs. 83 for extending drains of the 2 wash-houses to the adjoining nála outside the wall of the station hospital compound.

132. At Poona the following alterations to No. 5 barrack at Ghorpuri were made:—A partition wall has been constructed across the middle of the barrack, so as to divide it into two equal rooms. Twelve doors have been made into windows, the upper portion being hinged to fall inwards to an angle of 30°, and fitted with sheet iron cheeks to prevent draughts falling downwards on the men. The fanlights and clerestory windows have also been fitted in a similar manner. 2 doors and 2 clerestory windows have been blocked up, with the exception of small openings left at the junction of the new partition wall. The verandah on the north-west and south sides, from which the venetians have been removed, has been protected from the inbeat of rain and sun by 2 lines of teakwood weather-boards, and 3 porches have been built over the steps. Cutstone pavement, averaging 9 feet in width, with a shallow cutstone gutter along the outer edge, have been provided all round the barrack for drainage and protecting the building from damp at a cost of Rs. 7,619, and Rs. 167 were expended in constructing a urinary adjacent to the canteen in the Wanowrie Lines.

At Kirkee Rs. 1,260 were expended on 2 latrines and 3 temporary urinals, Rs. 820 for filling up with earth the portion of the branch canal in the immediate vicinity of the artillery barracks and patcheries, Rs. 154 on a small drain from cesspool in rear of the Gloster Barrack to the plot of ground proposed to be cultivated as a company garden. At Belgaum Rs. 260 were expended for extending a masonry open surface drain near C Barrack, European Infantry Lines, Rs. 145 for erecting a latrine of 6 seats for the use of Native followers of the European regiment, and Rs. 34 for providing a masonry sink and iron receptacle to the lavatory of the quarter-guard room in the Royal Artillery Lines. At Karáchi Rs. 25,371 were expended on water works for supplying water to troops in the cantonment, Rs. 773 for improving the drainage of the wash-houses and for providing drainage and apparatus for a drying ground for a laundry of the Royal Artillery, Rs. 166 for improving the laundry used by the Worcestershire Regiment, and Rs. 160 on 2 latrines. At Hyderabad Rs. 1,087 were spent for extending the open drain near the Royal Artillery stables to carry off the waste water from the European barrack lavatories, cook-houses, artillery patcheries and plunge bath, and Rs. 286 for providing roof ventilators to the Belooch Hospital. At Aden, Crater Position, Rs. 155 were spent for constructing a shed over the iron tanks of condensed water near the Native Infantry Lines, Rs. 237 for a latrine, Rs. 1,135 for improvements to drainage of waste water from the Native Infantry Lines, Steamer Point Position, and Rs. 884 for constructing a latrine. At Baroda Rs. 65 on temporary trench latrines, and Rs. 73 were expended for cleaning wells at the camp. At Jacobabad Rs. 358 were spent in constructing a block of latrines on the standard plan, with 14 seats.

SECTION IX.

SANITARY WORKS—CIVIL.

133. The original reports, received from the several municipalities, have been abstracted, and the results are here given.

134. The total annual income of the municipalities during the year 1885-86 was Rs. 31,32,776, and the sum expended on conservancy by them was Rs. 3,38,763.

135. The population, annual income, and expenditure on conservancy in each Revenue Division will be found in the following table :—

Divisions.	Population.	Income.	Expenditure on Conservancy.	Division.	Population.	Income.	Expenditure on Conservancy.
		Rs.	Rs.			Rs.	Rs.
Northern Division ...	567,252	8,88,484	95,081	Southern Division ...	352,874	3,93,001	28,865
Central Division ...	654,529	10,02,525	1,39,268	Sind	325,187	8,48,766	75,549
				Grand Total ...	2,899,842	31,32,776	3,38,763

136. *Water-supply.*—The supply, which is ample and of fairly good quality, is derived from rivers, tanks, and wells. Some of the municipal towns are mainly dependent on rivers for their drinking water-supply; and during the hot season, when the water becomes scanty, peons are temporarily employed to see that the water is not fouled; and when the rivers cease to flow, temporary wells are sunk in their beds. In Sind, canal water is used for drinking purposes in several towns. At Dholka Rs. 195 were expended in cleaning and repairing wells and tanks. At Viramgám a peon is employed by the municipality to watch the Gangásar Tank, as the water of this tank is used for cooking and drinking purposes. At Gogha the main supply of drinking water is obtained from the Rawkund, a reservoir situated in the town and fed by the Sonária Taláv, which is about a mile from the town; the water is brought by pipes, and is filtered before it enters the reservoir. At Kaira the river Watruk, on which the town is situated, is the principal source of water-supply for most part of the town. At Dohad there is a large tank, called *Chhabu*, to the west of the town, which supplies water, throughout the year, for drinking and washing purposes, Rs. 163 were expended for cleaning it, and Rs. 118 were spent for cleaning wells. The water-supply at Broach and Surat is insufficient. The well-to-do classes have masonry reservoirs under their houses, in which rain water, collected from the roofs, is stored. At Surat, schemes have been drawn up for supplying the City with good drinking water, but for want of funds they have not been carried out. At Ránder almost all the inhabitants use the water of the river Tápti; well water is preferred, but there are only 8 fresh-water wells. Mándvi town also gets its supply from the river Tápti. Thána has a good supply of water from Pokhran Tank, situated on the hills to the north-west and at a distance of about two miles from the town.

At Kalyán drinking water is obtained from the Shinule Tank; the water is brought from this tank to 4 wells, called "Gangás," of which one is close to the tank and the remaining 3 are in the centre of the town; a masonry aqueduct is built from the tank up to the first well, and from thence the water is carried by earthen pipes. At Kúrla the water-supply is insufficient and of bad quality: the mills and a few houses are supplied with Vehár water. Bándora is supplied with Vehár water, but the poorer classes drink water from a large tank which was cleaned out during the year under report. Washing clothes and watering cattle are not permitted in it.

At Máhím drinking water is obtained from the Ranjani Tank, which has been thoroughly repaired, and holds a good supply of water. A peon is engaged to see that the water is not fouled. At Bhiwndi the water is brought through iron pipes from the Warála Tank, which is about 1½ mile to the north-east of the town. The water from the tank passes through a sand and charcoal filter before entering the storage reservoir. At Peu the supply is obtained from an embanked reservoir about a mile from the town. At Roha-Ashtami there is a good water-supply: there are 10 hydrants situated in different parts of the town; besides, private houses have pipes laid on to them. Ahmednagar City is supplied with water from the Vadgaon, Kapurvádi, Nagabái, and Anandi aqueducts: all of them are fed by wells sunk in and about streamlets, which depend for their supply on the monsoon. During the year under report there were only 17 inches 7 cents of rainfall. The rainfall in Nagar during the last few years has been exceptionally scanty, and consequently a scarcity of water has been experienced during the hot seasons. The Nepty Aqueduct was restored at a cost of Rs. 19,000. At Jalgaon the water is brought through iron pipes from the Meherun Tank. At Erándol the water-supply is derived from the river Anjni; but in the hot weather, when the water ceases to flow, temporary wells are sunk in its bed. Igatpuri gets its water-supply from the lake constructed by the G. I. P. Railway Company to the north of the town. At Násik the water-supply is derived chiefly from the Godávari River: when the water becomes scanty, peons are temporarily entertained to see that the water is not polluted. At Talegaon Dábháda a large tank to the west of the town has been constructed at a cost of Rs. 36,000, and a service reservoir has also been built close to the town.

At Lonávla the drinking water-supply is obtained from the G. I. P. Railway Company's reservoir at Bhusi: there are 6 taps in different parts of the town. At Sirúr new water works are under construction to bring the river water in by pipes. At Poona City the following are the sources from which water is supplied :—

1. Katráj Aqueduct	about	...	...	... 650,000	gallons daily
2. Chavdharis	do.	...	...	... 50,000	do.
3. Nana Phadnis	do.	...	...	... 100,000	do.
4. Rastia's	do.	...	...	... 50,000	do.
5. Mutha	do.	...	...	... 650,000	do.

The total daily supply is about 1,500,000, or about 15 gallons per head of population.

At Jejuri the water is brought from Holkar's tank to four cisterns.

Poona (suburban municipal town) derives its water-supply from the Khadakvásla Canal and Mula Mutha River.

Sholápur gets a pure drinking water-supply from the Ekrúk Tank.

At Ratnágiri the water is brought by iron pipes from a tank to the east of the City.

Vengurla town gets its supply from the Náráin Tank, about half a mile away towards the north of the town. There are 13 troughs and 18 stand-pipes for the use of the public.

Karáchi gets a good supply from wells in the bed of the Mália River. The Aral Canal supplies Sehwan with drinking water. At Hyderabad City the following changes in the arrangement for water-supply were effected. The supply of water to the Eastern Kacha consists of a 2-bullock and a hand water service on the causeway, between tanks Nos. 2 and 3 one single cock hand service, 2 hand services on Dital Sháh Incline in Tahir Bázár, a single cock service at the top of Dital Sháh Incline, and a service on the Jail road, a service at the Mahomedan cemetery and at the Hindu *masan*, and 2 public services at Tanda Wali Mahammad. 13 private water services have been put up during the year under report.

137. *Drainage.*—No change since last year. In all municipal towns there are open masonry side drains in the main streets, but mere earth trenches in others to carry off rain water. There are no proper drains to carry off the kitchen and bath-room waste from private houses. In the Northern Division no drainage work of importance has been done in any of the municipal towns. At Ahmedabad, storm-water drains were repaired.

In Broach City a part of the liquid sewage is collected in troughs, and conveyed to the sewage depôt, but a very large portion of it finds its way into pits made by the people in or near their homes. These pits or wells (called khalkuvas) vary in depth from 20 to 40 feet and 3 to 4 feet in diameter: as the sides and bottoms of these pits are not impervious, the foul water escapes into the sub-soil. Kaira has five underground drains. At Surat there are no drains to carry off foul water, and the refuse water finds its way into the pit wells, which almost every house possesses. Ahmednagar has a few underground drains, but they are defective and imperfect. At Sangamner there is one main drain in the heart of the town; it empties itself in the river Mahálugi. At Junnar, drains were constructed during the year for carrying dirty water out of the town. In Poona suburban municipal limits there are no underground sewers constructed. The sullage in some places is collected in cesspits and removed by sweepers, and in others allowed to soak into the ground, or spread over ground where the compound of the house is large enough for the purpose. At Gokák, in the locality where the dyers work, there are covered masonry drains for conveying the dirty dyeing liquid to 3 masonry receptacles, from where it is carried out of the town. At Bágalkot there are 4 large drains through which the waste water of the town passes.

At Hyderabad the drainage and paving of the City is an urgent necessity. The services of Colonel Ducat, R.E., were lent by Government to the municipality for the purpose of preparing a sewerage scheme for the City. He has prepared a project which with minor connections is estimated to cost about 3 lákhs of rupees. The municipality has approved of the scheme. Colonel Ducat, R.E., was also deputed by Government to visit Sukkur for the purpose of giving his advice in regard to improving the drainage system of that town. His report was approved by the municipality, and detailed plans and estimates are being prepared.

138. *Cesspools.*—There are but few municipal cesspools, but in nearly all towns most of the private houses have them, and the owners at necessary intervals see to their cleanliness at their own expense. At Viramgám some new cesspools have been built, there being 585 private and 2 municipal cesspools against 483 in the previous year. In some other towns a few private cesspools have been built, but the construction of new ones is generally discouraged. At Mehmadabad there are 58 cesspools belonging to private individuals; the foul water of these is drained into jars buried under ground; some of which are provided with pucka kunds, or troughs, open at the mouth, and are cleaned out every third or fourth day. There are 807 cesspools at Ránder which are cleaned by the municipality, against 787 in the previous year.

At *Thána* the cesspools at almost all privies in the town are merely pits made in the ground, in which the foul water from the privies is accumulated. The municipality is, however, taking steps to compel the owners of all privies which are near wells to construct pucka or masonry cesspools in their stead.

There are no cesspools in the town of Mahád, in the Kolába Collectorate, but there is a nala in the town, which flows only during the rains, and measures are being taken to keep it clean.

Násik.—The same remarks apply as in last year's report.

There are 34 cesspools in the town of Sátára, which are cleaned out by 2 Bhangis and a cart, at a cost of Rs. 282.

At Sholápur there are 100 cesspools less than in the previous year, the privies to which they were attached having been connected with the surface drains constructed during 1885-86.

As in last year, at Shikárpur the cesspools under municipal control are kept fairly clean, and deodorized with quicklime when necessary, but never less than twice a month.

139. *Scavengering.*—The usual staff of sweepers is entertained by each municipality to keep the town and streets clean. Dust bins are provided in most towns in convenient spots, and emptied daily. At Dhandhuka the garbage is taken to a depôt about half a mile to the north of the town and sold as manure.

In the Parántij Municipality the whole of the rubbish and sweepings used to be carried away by the Bhangis to their own dust heaps, but since last year it is collected and sold : in fact, as a rule, street sweepings are now either sold, burnt, or used for filling up hollows. At Ránder the sweepings are largely sold to tile-makers. At Karáchi the reforms contemplated by the laying down of a light tramway for carrying away street sweepings have not yet been completed, but they will be carried out during the current year. In Thána the sweepings are used on newly reclaimed ground.

140. *Latrines.*—As observed last year, the larger number of municipal towns have public latrines, and private privies in some towns are cleaned by municipal sweepers. Nightsoil from latrines is carted to depôts about a mile or two from the towns, and is either buried or converted into poudrette. At Alíbág a new block of latrines was built. It is most objectionable to build latrines of lime and brick : the standard one sanctioned by Government ought always to be adopted.

141. *Urinals.*—As stated last year, only some of the municipal towns have urinals : these are attended to by Bhangis, and cleaned and disinfected each day. In the Poona City, V-shaped gutters have been built in 19 different localities to serve as urinals, into which a stream of water is discharged from the water main, and they are said to answer the purpose very well.

142. *Markets.*—In most of the towns there are no regular built markets, and the remarks made in last year's report apply. In Poona the municipality have, however, nearly completed a large central market, which is sufficiently advanced to enable the traders to move into it during the current year. At Bulsár the fish market is held in a temporary grass shed until funds are available to build a proper market. All existing markets are well washed and cleaned. At Kalyán the municipality intend to construct a new market for fish and meat. At Lonávla a market is in course of construction, and nearly completed.

143. *Burial-grounds and Cremation Gháts.*—There are several of each of these outside each town, and the latter are, as a rule, on the banks of rivers. It was noticed, last year, that steps would be taken to close 2 Mahomedan burial-grounds, which existed in the heart of the town of Dákor, one of which was on the side of a tank. In the year under report the municipality has provided a burial-ground at its own expense, distant from the town, and a well has also been constructed for the use of the Mahomedans. In all, it has cost the municipality Rs. 800, and the 2 burial-grounds in the town have been closed. At Bulsár there are some burial-grounds to the west of the town, which are said to be objectionable on sanitary grounds. At Alíbág there are said to be 4 Mahomedan cemeteries within the town, in which interments occasionally take place. At Erándol no separate place has been assigned for burials. At Erándol, Dharangaon, and Máheji there are no special places set apart for cremation.

144. *New Works.*—At Parántij Rs. 921-15-1 were spent in constructing a new well in the municipal dharmshála, repairing slopes, building a closet near the cattle-pound, &c. At Modása Rs. 450 were expended on metalling a portion of a road, and Rs. 386-1-4 in other works. At Kapadvanj a new metal road was constructed from the Medder Gate to the Shamsaid Chapla. At Dohad the road from Avna to Koliváda well was metalled during the year under report, at a cost of about Rs. 912-1-2. At Broach Rs. 41,483-3-2 were expended in finishing and paving certain roads, and Rs. 73-14-8 in constructing steps to Harichand Khadki. At Jambusar a new well was constructed. At Surat Rs. 9,553-12-1 were spent in works, out of which sum Rs. 7,506-9-5 were spent in improving the Jedda Khári. At Ránder 4 pits for the reception of water used in washing the latrines were dug during the year. At Thána Rs. 1,000 were advanced for 4 new hydrants being constructed by the Public Works Department, estimated to cost Rs. 1,606. At Kalyán Rs. 1,160-8-8 were paid for constructing new privies, and Rs. 1,618 on account of construction of new stables ; Rs. 463-14-3 were also debited, after the close of the year, on account of the new privies. At Bándra 2 new roads were constructed during the year. At Mábím 8 latrines were built costing Rs. 277-1-2, Rs. 151-8-6 were spent for materials for a new cattle-pound, and Rs. 178-3-6 in placing moorum on the road leading to Raituli. At Bhiwndi one stand-pipe was obtained, and

a road made to the Hindu burial-ground. At Alíbág Rs. 442-6-9 were spent on rebuilding a block of latrines, besides certain road repairs. At Pen 14 hydrants were constructed during the year. At Mahád Rs. 339-13-9 were expended during the year on new works. At Ahmednagar Rs. 24,852-8-4 were expended, during the year, on works of various descriptions. The Bhingár Municipality incurred an expense of Rs. 47 in making a washing pavement near the Mallali Tank, and Rs. 182-1-0 in other works. At Jalgaon a market and slaughter-house, a gutter, and water pipes were the new works undertaken. At Dhulia some 14,367 feet of roadway were metalled and 2,880 feet masonry open gutters constructed. At Amalner Rs. 325-4-5 were spent on works, and at Párola Rs. 133-3-7 in adding to the existing water works. At Shirpur a new road was made; likewise at Chopda Rs. 150 for constructing a road, Rs. 23 for a kutcha gutter, and Rs. 6 in road repairs necessitated by rain. At Bétávad Rs. 237-11-5 were spent for drainage sub-pipes. At Málegaon an octroi post was built at a cost of Rs. 444-0-6 and Rs. 130-11-6 expended in purchasing lands for widening roads. At Indápur 4 new streets were constructed, and at Sirúr new water works for pumping the river water into a reservoir in the town are being completed. At Poona Rs. 80,671-2-11 were expended under this head during 1885-86, but out of this sum Rs. 64,449-6-6 represent the year's outlay on the new market; V gutters, referred to under para. 141, cost Rs. 5,260, road improvement works Rs. 3,815-9-9, cisterns and stand-pipes and cost of laying down water pipes Rs. 2,757-10-11, and several other minor changes. In the Poona Suburban Municipality the triangular piece of ground on which the Morárji Gokuldás Fountain, near the G. I. P. Railway, stands, was fenced in with suitable iron and wooden fencing, some flower shrubs have been put in, and the place rendered a suitable resort for recreation. At Tásgaon a well was sunk in front of the dharmshála and 24 privies constructed; 12 privies were also constructed in the Ashta Municipality. In the City of Sátára Rs. 383-11-0 were spent in pulling down and rebuilding a latrine near the market, and Rs. 165-12-5 for completing a slaughter-house in the Sadar Bázár. At Shignápur a dharmshála and a road were constructed; at Mhasvad a road was improved. The aggregate cost of new drains and other works constructed at Sholápur were Rs. 3,508-5-3. At Bárvi a stable was constructed near the dharmshála for Rs. 96-2-11, and at Pandharpur several works were undertaken, without the cost being specified. At Jacobabad the works comprised slaughter-houses, gutters, a urinal; and pucka drains, &c., constructed during the year. At Belgaum a large public well was built, and other road improvements, &c., undertaken. A new road was constructed at Saundatti Yellama. At Gokák Rs. 96-11-2 were expended in the excavation of the Mudhol well, and at Gadag-Bettigeri dust-bins were newly built at a cost of Rs. 185. At Háveri 3 new roads cost Rs. 109-8-6, and repairs to roads Rs. 65-15-7. The Nargund Municipality expended Rs. 2,047-6-1 in the removal of prickly-pear on the hill, and Rs. 241-9-4 in connection with the water-supply; at Navalgund the expenditure amounted to Rs. 1,076-5-9, and at Ilkal Rs. 670-2-6. At Bijápur 150 new trees were planted at a cost of Rs. 192, and at Sirsi Rs. 398-9-0 for the construction of masonry side gutters in the Katte Bázár Street. In the Ratnágiri Municipalty Rs. 5,505-12-11 were expended in substituting iron pipes for the rubble masonry channel by which water is brought from the Nachana spring. At Dápoli the reservoir was repaired for Rs. 49-15-4, and the Vengurla Town Municipalty spent Rs. 970-11-3. In the Chiplún Municipalty, road repairs cost Rs. 542-4, Rs. 4,925-1-1 for the work of bringing water from the Shiva River by raising a mound, and Rs. 421-3-11 in other works. At Karáchi several roads were remetalled and some newly metalled, besides some paving done in the old town and Sadar districts. At Ketti Rs. 585-3-6 were expended for masonry sluices and a new bund. At Hyderabad waste-water drains, &c., were undertaken, and at Hála a shelter for horses and donkeys was built near the market at a cost of Rs. 147-2-3. At Tando Adam, land was purchased for a new market at a cost of Rs. 250. At Sukkur the new grass market cost Rs. 1,040, and drainage works Rs. 23,038-4-6. At Shikárpur Rs. 11,649-15-8 were expended, out of which Rs. 11,320-3-8 were spent for paving 20 streets. Some slight works were undertaken at Rohri, but at Lárkhána a new wing to the dispensary was built at a cost of Rs. 6,827-4-0. The Kambar Municipalty expended Rs. 788-9-0, the Rato-dero Municipalty Rs. 36, and the Garhi Hassan Municipality Rs. 3,013-3-0

for paving the bázár with pucka brick, and Rs. 76-3-2 for boundary stones. At Umarkot, roads cost Rs. 225, and repairs Rs. 23-4-1. Lastly, at Nagar a verandah to the market cost Rs. 159-5-0, and a platform for ghi traders Rs. 89-9-0.

LOCAL FUND CIRCLES.

Northern Division.

145. In the Ahmedabad Collectorate Rs. 22,553-7-1 were expended on water works, out of which sum Rs. 7,763-14-8 were expended by Civil Agency in sinking 14 new wells, Rs. 4,119 were spent by the Public Works Department, Rs. 10,669-14-0 were also spent by Civil Agency in repairing wells and tanks. In the Panch Mahál District, under water-supply in the several circles the expenditure amounted to Rs. 2,760. In the Kaira Collectorate under the same head, including repairs to tanks, wells, &c., Rs. 25,695 were expended during the year. Seventeen wells were constructed in the Jambusar, Ámod, and Vágra Talukás. In the Broach Collectorate 9 wells were constructed, and in the Thána Collectorate the works in connection with water-supply undertaken during the year cost Rs. 19,649-3-8.

Central Division.

146. In the Khándesh Collectorate several useful works, such as new wells and new drains together with repairs where necessary, were undertaken—the tálukás of Dhulia, Amalner, and Chálisgaon alone incurring an expenditure of Rs. 2,955-5, and Erándol and Pachora Rs. 3,470. In the Násik District Rs. 6,615 were expended in sinking new wells and repairing others, and in the Ahmednagar District Rs. 5,634 in the same description of works.

Southern Division.

147. In the Kánara District, Táluka Sirsi, a new well was built at Banvási at a cost of Rs. 369, one at Vandigi at Rs. 200, and improvements to a tank and construction of gutters in other tálukás, Rs. 271. In the Dhárwár Collectorate several new tanks were sunk during the year: at táluka Ránebennur a new well was constructed at a cost of Rs. 212. Several tanks were improved in Táluka Karigi; likewise in tálukás Hángal and Kod. The works constructed in the Dhárwár, Navalgund, and Ron Tálukás, together with repairs executed during the year, cost Rs. 8,376. In the Belgaum District Rs. 7,015 were expended from local funds on sanitary works.

Sind Division.

148. In the Karáchi Collectorate Rs. 3,104 were expended in the construction of certain wells, a bund, cholera sheds, &c. In the Hyderabad Collectorate Rs. 750 were spent for sinking a well and filling a hollow. In the Shikárpur Collectorate Rs. 29,271 were spent under water-supply, and in Thar and Párkar Rs. 500 were expended in constructing a well and Rs. 1,103 in repairing wells and tanks.

SECTION X.

PERSONAL PROCEEDINGS AND GENERAL REMARKS.

Personal Proceedings.

149. In January I proceeded to Sind and visited Sukkur, where I met Colonel Ducat, R.E., the Consulting Sanitary Engineer to Government, who had been invited by the Municipal Commissioners to prepare a scheme for improving the water-supply and the sewerage of the town. I then went to Shikárpur and to Jacobabad, and on my return visited Hyderabad, where I again met Colonel Ducat, and consulted with him regarding the sewerage of the City, after which I visited Karáchi, and inspected the cantonment and town. March was passed in Bombay, but in April I went to Poona, where I stayed through the remainder of the hot weather, as I was anxious to see the condition of the City and the country between the canal and the river during the hottest season of the year. I stayed the rains in Poona and gave evidence before the Finance Commission, and also attended the Committee to consider the provisions of the Bill for promoting sanitation in villages. In November I came to Bombay, and in December by order of Government was associated with the Surgeon-General, Her Majesty's Forces, in investigating the sanitary condition of Devláli and its vicinity. After the termination of this enquiry I went to Surat, and was there at the close of the year; but during my winter tour I inspected Broach, Nadiád, Viramgám, Ahmedabad, Sholápur, Bijápur, Gadag, and had reached Hubli, when I was recalled by telegram by Government in order to proceed to Khandva.

Government Resolution affecting the sanitation of the Port.

150. During 1886 the following regulations affecting or connected with the sanitation of the port were brought into force. By Government Resolution in the Judicial Department, No. 831, of 8th February 1886, Commanders of vessels entering the port are ordered to receive warning from the Port Trustees to clear out their bilges, and that in the event of accident arising from neglect of the warning, Government will prosecute the Commanders concerned.

Pilots on boarding incoming vessels to receive a certificate stating whether the ships are free from infectious disease or not.

151. By Government Resolution, General Department, No. 3139, dated 30th September, it is ordered that a pilot on boarding an incoming vessel should receive a certificate signed by the master and medical officer, or, in the latter's absence, by the 1st officer, stating whether the vessel is free from infectious disease or not. This order, Dr. MacCartie says, has supplied a long-felt want.

Pao Pir selected as Quarantine station.

152. By Government Resolution, General Department, No. 4056, dated 20th November 1886, and Government Resolution No. 4834, Military Department, dated 26th November 1886, it is directed that Pao Pir be considered the quarantine station for Bombay, and that the Ordnance Department should furnish any tents required in the fair season, and that, should necessity arise during the South-West Monsoon, special orders should be applied for.

The following return shows the number of crews and passengers of outward square-rigged vessels and steamers inspected by the Health Officer of the Port during the year ending 31st December 1886, including Government hired transports, of which the crews only were inspected :—

No.	Names of Ports to which sailed.	Number of Ships.	Number of Individuals comprising Crews.	Number of Passengers.	Total of Crews and Passengers.
1	Europe *viâ* Canal	434	24,071	6,560	30,631
2	Aden and Eastern Coast of Africa ...	13	1,009	334	1,343
3	Red Sea Ports	12	762	250	1,012
4	Suez	...	...	...	...
5	Port Said...	21	787	33	820
6	Mauritius...	25	707	1,044	1,751
7	Persian Gulf	22	1,106	1,700	2,806
	Grand Total ...	527	28,442	9,921	38,363
	1885 ...	618	34,079	13,995	48,074

Table showing the number of crews and passengers of outward Native craft inspected during the year 1886 :—

No.	Names of Ports to which sailed.	Number of Vessels.	Number of Individuals comprising Crews.	Number of Passengers.	Total Number of Crews and Passengers.
1	Persian Gulf Ports	111	2,255	359	2,614
2	Other Foreign Ports	130	2,974	610	3,584
	Grand Total ...	241	5,229	969	6,198
	1885 ...	232	5,422	1,252	6,674

Return of outward pilgrim ships inspected during the the year 1886 :—

No.	Name of Vessel.	Date of Departure.	Number of Individuals comprising Crews.	Number of Pilgrims.						Total Crews and Passengers.
				Men.	Women.	Boys.	Girls.	Infants.	Total.	
1	S. S. "Adria"	3rd March 1886 ..	51	180	93	17	8	6	309	360
2	" "Taif"	14th April do. ..	63	188	142	17	5	12	364	427
3	" "Mobile"	20th May do. ..	54	197	88	4	6	9	304	358
4	" "Bangalore"	31st do. do. ..	75	671	280	25	20	23	1,019	1,094
5	" "Sumatra"	7th June do. ..	74	802	141	55	5	9	1,012	1,086
6	" "Adowa"	7th July do. ..	59	635	135	35	12	13	830	889
7	" "Bangalore"	21st do. do. ..	78	707	253	20	6	15	1,001	1,079
8	" "Peshwa"	29th do. do. ..	66	690	120	8	4	3	825	891
9	" "Empress of India.. ..	31st do. do. ..	66	497	241	13	12	15	778	844
10	" "Anglo-Indian"	2nd August do. ..	72	536	164	17	12	12	741	813
11	" "Sumatra"	4th do. do. ..	80	699	293	33	19	14	1,058	1,138
12	" "Sumatra"	24th October do. ..	79	109	63	17	11	1	201	280
13	" "Bangalore"	31st December do. ..	80	228	148	15	7	20	418	498
	Grand Total ..	....	897	6,139	2,166	276	127	152	8,860	9,757
	1885 ..	....	769	..	..	..	..	..	8,436	9,205

Total of the above three tables :—

No.	Class.	Number of Vessels.	Number of Crews, Passengers, and Pilgrims.
1	Square-rigged and steamers	527	38,363
2	Native Craft	241	6,198
3	Pilgrim ships	13	9,757
	Total ...	781	54,318
	1885 ...	862	63,953

153. Upon no occasion was a case of infectious disease discovered on board a vessel, nor was a clean bill refused to any vessel.

Infectious disease.

154. Dr. MacCartie reports that the ships he inspected during the year were generally found to be in a fairly good sanitary condition, with the exception of the pilgrim ships, which were fouled by the pilgrims on board.

Sanitary condition of vessels.

155. In 2 cases, inquests were held on bodies of native boys who died from having been poisoned by foul gas whilst cleaning bilges. In neither case Dr. MacCartie reports was there any reason to suppose that the bilges had been culpably neglected, and he says that, on the whole, ships' captains have attended to the warning handed to them on their arrival into port, that they should clean out the bilges.

Ships' bilges.

156. Dr. MacCartie also notices that no vessel having left this port with a clean bill of health arrived at another port with infectious disease on board, with the exception of the troop-ship "Euphrates."

Infectious disease on board vessels leaving port with clean bill of health.

157. Dr. MacCartie brings to notice that Native craft bound for Persian Gulf, Aden, and Makulla are sometimes much overcrowded.

Passengers in Native Craft.

158. The following table shows the number of troop ships provided, according to the order of Government, with clean bills of health without an inspection of the crew and passengers by the Health Officer of the Port, on production of a certificate that the crews and passengers are free from infectious disease, and that the vessel is in a satisfactory sanitary condition.

Bills of health provided to Troop ships.

No.	Name of Vessel.	Date of Departure.	Destination.
1	H. M.'s troop ship "Crocodile"	8th January 1886...	Europe.
2	Do. do. "Malabar"	20th do. do.	Do.
3	Do. do. "Jumna"	3rd February do.	Do.
4	Do. do. "Serapis"	12th March do.	Do.
5	Do. do. "Crocodile"	24th do. do.	Do.
6	Do. marine ship "Amberwitch"	28th do. do.	Aden.
7	Do. troop ship "Malabar"	3rd April do.	Europe.
8	Do. do. "Jumna"	18th do. do.	Do.
9	Do. ship "Woodlark"	22nd May do.	Muskat.
10	Do. marine ship "Amberwitch"	24th September do.	Aden.
11	Do. troop ship "Euphrates"	16th October do.	Europe.
12	Do. do. "Serapis"	30th do. do.	Do.
13	Do. do. "Crocodile"	13th November do.	Do.
14	Do. do. "Jumna"	26th do. do.	Do.

Bills of health to coasting vessels, &c.

159. 419 bills of health were given, during the year, to vessels bound to ports on the coast, Rangoon, Singapur, Hongkong, &c.

INCOMING VESSELS.

Pratique.

160. All vessels entering the port, if free from disease, have had free pratique.

161. The following table shows the number of vessels which entered the port flying the R flag, and which were visited by the Health Officer. It includes H. M.'s troop ships, which it is usual to inspect on arrival :—

Vessels entering Port with R. flag.

No.	Name of Vessel.	Date of arrival in Bombay.	From what Port.	Number of Individuals comprising Crews.	Number of Passengers.	Number of Cases of Infectious Disease.	Nature of Disease.
1	H. M.'s troop ship "Malabar	10th January 1886..	Europe ..	261	1,273	1	Chicken pox.
2	Do. do. "Jumna"	27th do. do.	Do. ..	261	1,194	None.	None.
3	The troop freight ship "Hankow" .	28th do. do.	Do. ..	80	932	None.	None.
4	Do. do. "India"	9th February do.	Do. ..	140	912	None.	None.
5	Do. do. "Deccan" ..	14th do. do.	Do. ..	134	913	None.	None.
6	Do. do. "Surat"	2nd March do.	Do. ..	153	770	None.	None.
7	H. M.'s troop ship "Serapis"	4th do. do.	Do. ..	263	1,347	6	Measles (German).
8	The troop freight ship "Australia" ..	9th do. do.	Do. ..	166	212	None.	None.
9	H. M.'s troop ship "Crocodile"	12th do. do.	Do. ..	265	1,269	None.	None.
10	Do. do. "Malabar"	24th do. do.	Do. ..	261	1,277	None.	None.
11	The troop freight ship "Pekin"	29th do. do.	Do. ..	145	548	None.	None.
12	Do. do. "Mirzapore" ..	5th April do.	Do. ..	157	353	1	Measles.
13	H. M.'s troop ship "Jumna"	11th do. do.	Do. ..	261	1,226	None.	None.
14	Do. do. "Euphrates"	6th October do.	Do. ..	261	1,179	None.	None.
15	Pilgrim ship "Sumatra"	8th do. do.	Aden ..	71	1,025	4	Small-pox and 2 convalescent.
16	H. M.'s troop ship "Serapis"	26th do. do.	Europe ..	261	1,199	None.	None.
17	Pilgrim ship "Bangalore"	26th do. do.	Aden ..	77	480	1	Convalescent small-pox.
18	H. M.'s troop ship "Crocodile"	2nd November do.	Europe ..	261	1,301	None.	None.
19	Do. do. "Jumna"	18th do. do.	Do. ..	261	1,262	None.	None.
20	S. S. "Accomac"	26th do. do.	Suez ..	29	None.	1	Small-pox.
21	H. M.'s troop ship "Euphrates" ..	22nd December do.	Europe ..	261	1,367	None.	None.
	Total ..	....	....	4,029	20,146	14	
	1885 ..	....	....	3,454	14,629	14	

162. In only one case was it found necessary to detain, at the quarantine anchorage, a vessel—the pilgrim ship "Sumatra"—which arrived in port on the 8th October, having had one death and several cases convalescent from small-pox. As the vessel arrived after sunset, the passengers were not allowed to land, and the ship was detained until next morning, when 132 passengers unprotected by vaccination were vaccinated, after which pratique was given. Dr. MacCartie mentions that praise is due to the Superintendent of Vaccination for the promptitude with which he sent off a staff of vaccinators.

Only one ship detained at Quarantine anchorage.

163. Dr. MacCartie makes some interesting remarks on the pilgrim traffic, which are, however, too long to print, and he brings to notice the great difficulty in preventing fouling of the water in the Prince's Dock when pilgrims are taken on board vessels lying in it.

Dr. MacCartie's remarks on pilgrim traffic.

164. The following table shows the number of pilgrims arrived from Jeddah during the year 1886 :—

No.	Name of Ship.	Date of Arrival in Bombay.	Number of Pilgrims.	Number of Admissions into Hospital.	Number of Deaths.	Remarks.
1	S. S. "Orion"	January 13th, 1886.	237	10	6	
2	Do. "Metepedia" *	Do. 30th "	847	No records	27	* Commander prosecuted before the Chief Presidency Magistrate for failing to observe the rules under the Red Sea Pilgrim Traffic, and fined Rs. 50.
3	Do. "Taif"	Do. 31st "	444	10	7	
4	Do. "Adria"	April 11th "	56½	Nil.	Nil.	
5	Do. "Taif"	May 30th "	82	Nil.	Nil.	
6	Do. "Bangalore"	July 10th "	3	Nil.	Nil.	
7	Do. "Sumatra"	Do. 18th "	3	Nil.	Nil.	
8	Do. "King Arthur"	August 28th "	5	Nil.	Nil.	
9	Barque "Amatulah Rahamon"	September 1st "	7	Nil.	Nil.	
10	Do. "Sumatra"	October 8th "	1,001½	18	10	
11	Do. "Empress of India" ...	Do. 12th "	279½	10	7	
12	Do. "Bangalore"	Do. 20th "	457	29	5	
13	Do. "Taif" †	November 25th "	652	37	2	† Commanders prosecuted before the Chief Presidency Magistrate for conveying passengers in excess of the number allowed by their certificates, and fined Rs. 273, Rs. 650 and Rs. 1350 respectively.
14	Do. "King Arthur" † ...	Do. 27th "	625	Nil.	7	
15	Do. "Sumatra" †	December 8th "	1,152½	18	14	
16	Do. "Malabar"	Do. 13th "	298	30	4	
	Total ...		6,150	162	89	
	1885 ...		5,045	103	57	

From the above table it will be seen that the Commanders of 4 vessels were prosecuted, on arrival in Bombay, for infringing the regulations of the Red Sea Pilgrim Traffic.

165. Dr. MacCartie points out that, unless a heavy fine is inflicted, it will pay the owner to pay a small fine, rather than to go to the expense of rendering the vessel suitable for the requirements of a pilgrim traffic.

Reason for heavy fines being inflicted.

In 3 of the above cases the masters were prosecuted for carrying passengers in excess of the number allowed by the regulations.

166. There were only 3 cases of cholera, 2 of which proved fatal, reported among the harbour population (24,887) during the year.

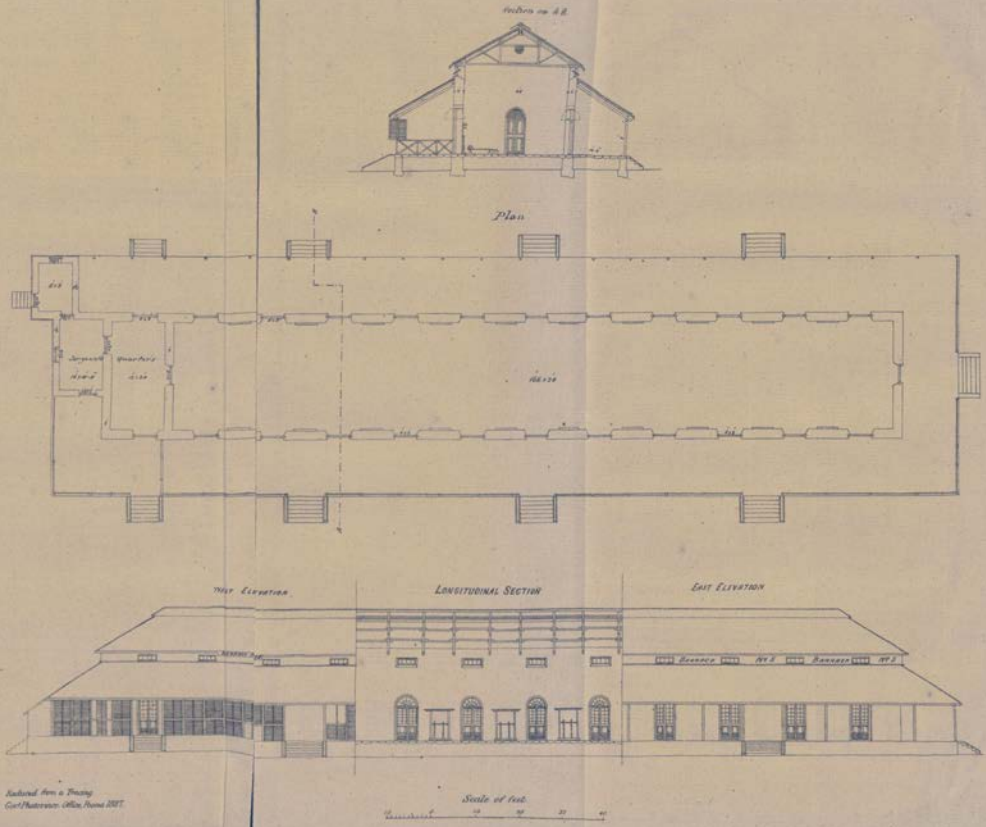
Cholera in 1885.

167. The sanitary condition of the harbour and its foreshore forms the concluding portion of Dr. MacCartie's annual report. His remarks are too long to print, and have been submitted to Government, but he says nightsoil pollution still exists as much as ever along the foreshore. The actual improvements carried

Sanitary condition of the Harbour and foreshore.

No 1

Ghorepooree New Barracks



Reduced from a Tracing
Govt Photozincotype Office, Poona 1887.

out, in accordance with the Sanitary Commissioner's recommendations, appear to be as follows:—

1. *Mint.*—Fencing in of space between the Mint compound wall and wharf.
2. *Modi Bay.*—Erection of latrine for Port Trust employés.
3. *Wadi Bandar.*—Provision of latrine of 5 seats.
4. *Carnac Bandar.*—Dredging of the basin.
5. *New Dock Extension.*—Cessation of discharge of latrines into the harbour.
6. *Malet Bandar.*—Erection of a latrine.
7. *Clerk Bandar.*—Erection of a latrine of 4 seats.

So that, generally speaking, the conditions, as described in the Sanitary Commissioner's letter, still exist, with the exception of the two really tangible improvements in the New Dock extension, where latrines have been erected which do not discharge into the harbour, and at Carnac Bandar where the basin has been dredged. It is, I submit, not too much to ask that the Port Trustees should be compelled to place the foreshore of this large and important harbour in a really satisfactory state. This can only be done by their providing ample latrine accommodation for the poor, who formerly enjoyed the right of easement over the foreshore.

No drains should discharge into basins.

168. Dr. MacCartie rightly insists on the immediate necessity for preventing all drains from discharging their filthy contents into basins, and instances the Mazagon drain, which, in spite of our remonstrances, still discharges into the Kasara Basin. All such drains which do not admit of being diverted, should be extended out to below the low-water mark, and the basins should not be allowed to become the receptacles of all kinds of filth which are now thrown into them. The necessity which exists for the periodical dredging of these basins is most apparent, and I hope Government will insist upon it being carried out.

Ghorpuri Barracks.

169. Among the more important events of the year I must mention that the sanitary or rather the insanitary condition of the Ghorpuri barracks again was referred to me. I may perhaps be permitted to recall to recollection that, before the new barracks were built in 1877 at Ghorpuri, I brought, as strongly as I could, to notice my opinion that it was for sanitary reasons most undesirable to erect them on this site, which from its position would be always more or less malarious; and when it was determined, in spite of my remonstrances, that the barracks were to be built, I tried, but failed, to get the design altered to that recommended by the Army Sanitary Commission, which embodies all the recommendations made by the Royal Sanitary Commission for barracks in future to be built in India, and which is especially well adapted as a barrack for European soldiers serving in a tropical climate.

Unhealthiness of new barracks at Ghorpuri.

170. I need not here do more than mention how notoriously unhealthy these barracks have been ever since they were built. So bad a reputation did they obtain that at one time their permanent abandonment was, I believe, almost resolved upon; but in the commencement of this year I suggested that certain alterations could be made in them, and said that if one barrack was handed over to me, I could improve its sanitary condition. This suggestion met with the approval of General Gillespie, C.B., then Quarter-Master General of the Army, and Government were pleased by Government Resolution, Public Works Department No. 47 M. W.-322, dated 26th February, to sanction the experiment being made.

Selection of No. 5 new barrack.

171. I was informed that No. 5 new barrack, which occupies the most exposed position on the south-west of the Lines, had been the most unhealthy barrack, and I, therefore, selected it as the one in which the experiment should be tried.

Description of No. 5 barrack room before it was altered.

172. The diagram No. 1, on the opposite page, shows a plan and elevation of the barrack as I found it. It consisted of one long room 166′ x 24′, and was intended for the accommodation of 44 men. The Sergeants' quarters are on the

north side of the barrack. There were 11 doors on each side of the barrack room, besides a door at either end—that on the south opening into the verandah, and that on the north into the Sergeants' quarters. The doors consisted of the usual glass and panelled door, 8 feet in height, with a revolving fanlight over each door, and high up under the eaves is a clerestory window. Ridge ventilation is also provided. The floors are paved with stone laid in cement, and there is a 3′ plinth. A 12′ verandah surrounds the barrack room on each side, except the north, which on the south and west sides was enclosed by venetians extending from the floor to the tie beam of the roof over the verandah. During the rains the venetians were kept permanently closed, and the men placed their dining tables at that season in the east verandah. The barrack room, when the venetians were closed, was extremely dark and gloomy, as no sun and comparatively but little light entered it, and the vault-like feeling in the barrack room has been complained of. If the doors were shut, and the revolving fanlights were kept open, currents of cold air blew down on the men whilst in bed, and the same thing happened if the clerestory windows were kept open, which, as a matter of fact, was rarely the case, as the men took every opportunity of closing them. There were no eaves gutters or downtakes, nor any provision for carrying away the storm water falling on the roof, which consequently soaked into the foundation.

Under-draining of site proposed in 1877, but negatived by Government.

173. Such was the barrack room when handed over to me. It stands on the most exposed position, with the race-course hill and maidán on the south and south-west. I had in 1877 proposed that the ground on which the new barracks were to be erected should be provided with sub-soil drains, but Government resolved that the execution of the work should be left for some future day.

Principles on which recommendations for alterations were made.

174. It will be seen, from No. 1 diagram, that it was impossible to alter the general design of the barrack, and I never professed to be able to convert it into a perfectly satisfactory building; but I thought some of the more glaring errors of construction could be improved, and in the recommendations I made I tried to give effect, as far as circumstances admitted, to the instructions regarding barracks as laid down by the Army Sanitary Commission in their suggestions for improving Indian stations.

Some of the original proposals could not be carried out on account of the expense.

175. On receiving the above Government Resolution I made certain proposals which I was anxious should be carried out; but I was informed that some of them, such as the under drainage of the site, the provision of ventilation under the floors, &c., would be very costly, so that I was compelled to considerably modify my original proposals regarding the barrack.

The alterations made.

176. No. 2 diagram will show the alterations which have been carried out in accordance with my suggestions. Commencing with the outside I, must mention that no roof gutters were procurable in Bombay, so that they could not be fixed as I had suggested. As the next best alternative, a stone gutter has been laid all round the barrack, and led to a safe distance from it, and the ground between the plinth and this gutter has been paved at a steep pitch, so that rain falling on it will speedily be carried into the gutter.

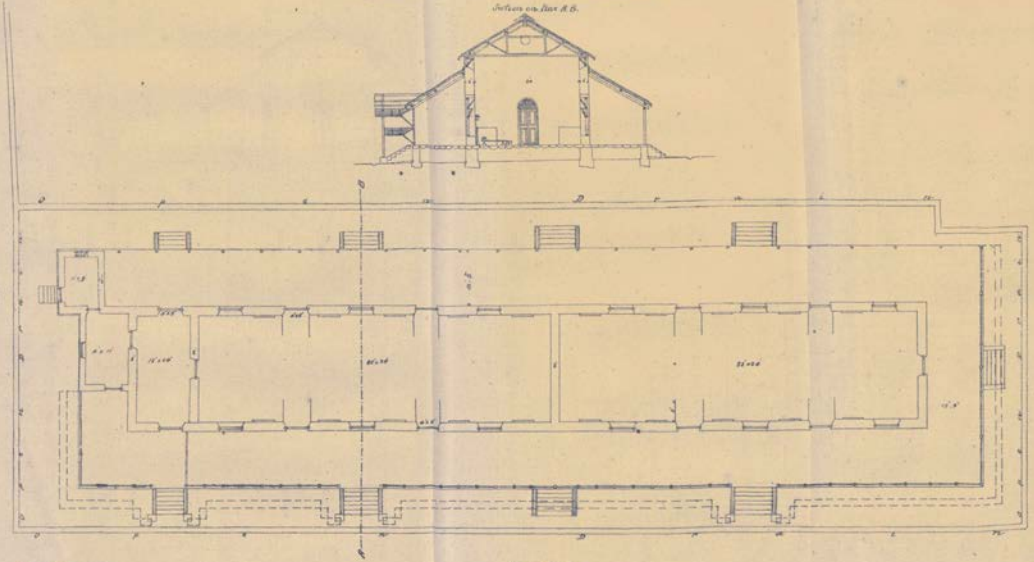
It will be noticed that the venetians have been entirely removed according to the great sanitary principle laid down by the Army Sanitary Commission, that the air be allowed to play over as large a surface of the building as possible. There ought to be no impediment to the free entrance of the external air up to the wall of a barrack room, so that at all times day and night, and whether it is raining or not, fresh air in abundance may be introduced into the room. Whereas if, as suggested by some, the lower half of the verandah outside the barrack room is enclosed by venetians, air and light and sun are shut out, and the framework of the venetians forms a resting place for dust and dirt to accumulate, and favors the gowth of fungi, &c., and makes the place dark.

№ 2

PLAN OF GHORPURI NEW BARRACK

Showing improvements proposed by the Sanitary Commissioner

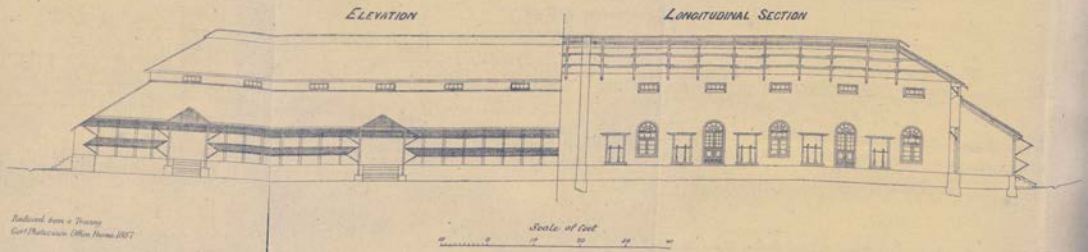
Section on Plan A.B.



Reduced from a Drawing
Govt Photozinco. Office, Poona, 1887.

Scale of feet

No. 3.



Reduced from a Tracing
Govt Photozincon Office Home 1887

Substitution of wooden jhamps for the venetians.

177. In lieu of the venetians, 2 wooden weather-boards or jhamps have been fixed, the upper one being in continuation of the verandah roof, and the lower one being placed half way down the verandah posts. The upper jhamp keeps the direct rays of the sun from striking into the verandah, and also protects it from rain, whilst the lower jhamp is intended to keep out the rain from the floor of the verandah : without it the rain would drift into the verandah. During the height of the monsoon some rain may perhaps on two or three occasions drizzle into the verandah, but should it do so the men will be no worse off in this barrack room than they are now in each of the other new barracks, where throughout the monsoon the tables are removed to the verandah on the east side, which is entirely shut out from the South-West monsoon. The substitution of these jhamps for the venetians has thus enabled sun and light to be admitted into the barrack room, whilst the men in the barrack have the great advantage of a cheerful look out and plenty of fresh air brought up to the wall of the barrack room.

Porches.

178. Another alteration was the closing of one of the steps on the south side and on the west, and the fixing of a porch over each of the steps on the west side. This was done in order to prevent, as now, the rain beating in, and keeping the floor of the verandah opposite each flight of steps permanently wet during the monsoon.

Diagram 3.

179. These alterations will be best seen by a reference to diagram 3.

Alterations made in barrack room.

180. As regards the alterations carried out in the barrack room, it will be seen that the room, which was 166 feet long, has been divided by a central wall into 2 rooms, each 82 feet long. This alteration was recommended in accordance with the following extract from the revised suggestions of the Army Sanitary Commission :—

"The Royal Commission recommended that future barracks be built to accommodate not more than a quarter company per room, and that each block should consist of one single quarter company room, or, at the most, of two such rooms in line completely cut off from each other, with separate doors to the open air * * * The sanitary principle, on which the construction of barracks in quarter company rooms is based, is that considerable sub-division in buildings is absolutely necessary for health in tropical countries. * * * * * A separate barrack block would thus contain 24 men in one room and 1 sergeant, or 48 men in 2 rooms and 2 sergeants. Wherever the older class of barrack rooms still exists, or where large numbers of men occupy one room, or where the block is divided into rooms by walls with open arches, there is much greater risk during epidemic seasons, especially when cholera is in the vicinity, than there would be if the rooms were sub-divided into smaller rooms with separate entrances. Under the best attainable sanitary arrangements, simple agglomeration of men in numbers in one room breathing a common atmosphere is an epidemic disease cause. The only remedy in such cases is to sub-divide the rooms, providing separate entrances and separate ventilation for each sub-division, and to provide ventilation under the floor."

The last recommendation could not, on account of expense, be carried out ; but the sub-division of the rooms is strictly in accordance with the recommendation of the Army Sanitary Commission. It has been objected that this sub-division will make the room hot ; but this has not been found to be the case, and the breeze has freer access into the building than it had before the venetians were removed.

Army Sanitary Commission's instructions regarding ventilation.

181. The next alteration was the conversion of 6 of the 10 doors in each of the rooms into windows. The instructions of the Army Sanitary Commission are : "There should be a window for every 2 beds * * * * 5 doors per room, 2 on each side, and one at each end will afford sufficient door space in a room for 24 men * * * It is necessary to shield the beds nearest the door from air blasts when the doors are kept open by thin partitions a few feet in height and 3 or 4 feet in width. The window sills should

not be more than 2 feet or 2 feet 6 inches above the floors, and the head of the window should be carried up to within a foot or 18 inches of the ceiling." (This last recommendation could not be carried out on account of the roof of the verandah being in the way.) "Every window should consist of 2 parts: the upper portion, about 2 feet in depth, should be hinged on its lower edge, and fall inwards, to form a species of louvre for ventilation. On each side of the hinged portion should be a triangular cheek to prevent air currents falling on the men. This louvred portion of the window should admit of being easily closed by a rope or pulley To whatever extent it is opened, air currents will be directed towards the ceiling of the room. The lower portion of the window should be a casement opening into 2 halves. The windows should be 4 feet wide."

The manner in which the instructions were carried out.

182. These are the directions, and the following is an account of what was done to give effect to them. Six of the doors in each room, 3 on either side, were converted into windows, leaving 2 doors, as directed, on either side and an end door. The sill of each window is 2 feet above the floor. Each window consists of two parts (see diagram No. 4). The upper portion, 1 foot 6 inches in depth, is hinged on its lower edge, to fall inwards so as to form a species of large louvre for ventilation. On each side of the hinged portion there is a triangular iron cheek, to prevent air currents falling upon the men. This hinged portion is opened and closed by a rope over a pulley. The lower portion of the window is a casement 4 feet square. It opens in 2 halves. The semicircular fanlights over each door and window are hinged on the lower edge so as to fall inwards, whilst an iron cheek on the sides prevents air currents falling on the men whilst in bed. These fanlights ought to be rectangular; but it was impossible, on account of the expense, to alter the original arches over the doors and windows.

The clerestory windows were likewise hinged on the lower edges, and made to fall inwards at an angle of 45°, their sides being protected to prevent air falling downwards, and so as to direct the air entering upwards towards the ceiling. Wooden screens have also been placed on either side of each door to prevent air currents blowing on to the men next to the doors when open.

Danger of chills brought to notice by the Army Sanitary Commission.

183. I have thus endeavoured to carry out the instructions of the Army Sanitary Commission, who in their Memorandum on the Medical History of the European Troops in the Bombay Command for 1882 say: "There is distinct evidence that if movement of air is set up outside, it passes over the men in bed, chills them, and induces hepatic affections and fever attacks at some stations. The principal point to be kept in view is that whenever cold currents of night air are allowed to fall on men whilst in bed, there is more or less danger of chills, and hence the necessity of proper ventilating arrangements in all such cases. The objection lies, not against ventilation, but against cold air currents, which can always be prevented, while the ventilation itself is not interfered with."

The alterations summarized.

184. The alterations which have been carried out will, I hope, render an unhealthy barrack less unhealthy. Light and air have been admitted into it. It has been divided as recommended by the highest authority on the subject, and the ventilation has been improved by carrying out the great sanitary principle of *making it independent of doors and windows*, so that it is now possible to let in abundance of fresh air at all hours of the day and night into the barrack without causing draught, whilst measures have been taken to protect the men from chill. It was not possible to correct all the original mistakes of construction, such as having the Sergeants' room at one end instead of in the centre of the building. The height of the windows could not be increased, nor could ventilation under the floors be provided, or any means taken for preventing moisture arising from the sub-soil, except by preventing the roof water soaking into it. The total cost of these alterations amounted to Rs. 7,618-9-10, and I would take this opportunity of expressing how much indebted I am to Major-General Goodfellow, C.B., R.E., Secretary to Government, Public Works Department, for having, with great difficulty I fear, provided the necessary funds; and I would also especially record

No 4

Reduced from a Tracing
Govt Photozincos Office, Poona, 1917

the very great assistance afforded me by Major Haydon, R.E., Executive Engineer, Poona and Kirkee, by whose zealous and most kind and ingenious co-operation the many difficulties experienced in adapting the old barrack were successfully overcome.

Recommendation that this system should be tried at Mhow and Karáchi.

185. In order to have a more perfect demonstration and trial of the system, I was anxious to have No. 4 Infantry barracks at Mhow and one of the Napier Barracks at Karáchi altered in the same way.

Persistent unhealthiness of Napier Barracks at Karáchi.

186. The Napier Barracks at Karáchi have for many years past had an unenviable notoriety for unhealthiness, and this fact is year by year persistently brought to notice by the Army Sanitary Commission in their annual memorandum on the health of the British troops in the Bombay Command. The question I asked myself is, can nothing be done to improve the sanitary condition of these barracks? Are the men in them to be left, year by year, to become inefficient as soldiers when the sanitary condition of the barracks can be improved at a moderate cost?

Description of Napier Barracks.

187. Each of the upper-storied Napier Barracks is 277 feet long, or nearly 3 times as long as it should be, and more adapted for a shooting gallery than for a barrack. Each room on the upper floor contains 66 men instead of 24, the unit fixed by the Royal Commission for a barrack room. I pointed out that the advice of the Army Sanitary Commission, as given above in paragraph 180, is peculiarly applicable to these barracks, and I recommended that this long upper-storied room should be converted into 3 rooms by building 2 partition walls, and that all, but 2, doors on each side of each room should be converted into windows, and that, if the construction admits of it, that the door and windows recommended by the Army Sanitary Commission should be fixed, and, if not, that an adaptation, similar to that carried out at No. 5 barrack at Ghorpuri, should be made.

Disease in the barrack may in a great measure be avoided.

188. I pointed out to Government that much of the disease attacking the men in these barracks was due, in my opinion, to the infraction of the great sanitary principle of the ventilation being independent of doors and windows. The barracks are very draughty, and it is impossible, in present circumstances, to ventilate them properly.

Government resolve to wait.

189. Government, however, ruled that it was better to wait to see the result of the experiment in the barrack at Ghorpuri. I was sorry for this resolution, as I feel confident that the advice I gave was sound, and would, if carried out, have a very potential effect in reducing the sickness among men at Karáchi.

Remarks on ventilation in houses and rooms.

190. The question of efficient ventilation in India has a much wider aspect than merely its application to barracks. From the experience gained in 33 years' service, nearly 29 of which have been passed in the country, I am firmly and fully convinced that more than half the illness Europeans suffer from in this country is the result of chill, and this is largely to be ascribed to the very faulty and unscientific means of ventilation employed in the usual Indian bungalow. By the most extraordinary arrangement, Europeans in this country have adopted the same kind of bungalow from Cape Comorin to Peshawar. It is as if there should be only one design for a house between London and Brindisi, as if there were not different climates to be met with in this vast continent. A house which would suit the hot and sultry climate of Hyderabad in Sind would not be suitable for the coast climate of Karáchi, where there is always a strong sea breeze blowing. The dry climate of the Deccan differs essentially from the hot moist climate of Gujarát; yet, as in the case of barracks, there is one standard design for bungalows. All have numerous doors opening out of sitting rooms and bed rooms, and there are but few windows, and even where there are windows they cannot be opened without admitting a current of cold air on the level in which the occupant of the rooms is either sitting or whilst in bed.

Ventilation should be independent of doors and windows.

191. The great sanitary principle of making the *ventilation independent of doors and windows has been forgotten*, and not acted up to, and people in India will continue to suffer from fever, liver-complaints, &c., to a much greater degree than they would do if only common-sense would induce them to carry out the first great sanitary law regarding ventilation.

Windows and doors in Dutch Factory at Surat.

192. The Dutch, two hundred years ago, were wiser, and the diagram on the opposite page represents a door and window in the old Dutch Factory, now the travellers' bungalow, at Surat. It will be seen that when the windows and doors are shut, by keeping the upper window open, plenty of air is admitted into the room without blowing directly on to its occupant. In fact, if the upper window had been hinged on its lower edge, and its sides protected by a shield, and the window kept open at an angle of 45°, it would have been a perfect system of ventilation, and one which would have embodied all the recommendations of the Army Sanitary Commission. I can testify, from personal experience, to the great comfort afforded by the window. As it is, the air in the room is kept fresh and pure during the hours of sleep, even when the lower window and door are kept shut.

Necessity for general introduction of better means of ventilation throughout India.

193. It is to be much wished that this system of ventilation were generally introduced into private houses as well as into barracks throughout India, as I am quite confident no measure would tend to promote the health and comfort of the European residents to a greater degree, and it is a subject I would especially recommend to the notice of architects.

Standard plans for barracks.

194. I hope also these remarks will attract the attention of sanitarians in England, so as to raise the question whether barracks should be built in India according to standard plans, which, irrespective of the varying conditions of climate, are made applicable to the whole continent of India; and I hope also the designs of the standard plans, which are in use in India, will be examined by experts in England. For my part, I entirely condemn them, and maintain that they are full of sanitary errors. It seems very hard that in no single instance, as far as I am aware, has a barrack been built according to the design published by the Army Sanitary Commission in their suggestions. Its superiority over the standard plans, which obtain in India, is manifest to any one who knows any thing about sanitary science and requirements, and I can conceive no subject which more intimately affects the health of the European Army in India. Sanitary science has made great strides since the date when these standard plans were drawn up, and experience has shown them to be faulty, and not to embody the fundamental sanitary principles which must be observed to ensure healthy buildings. I would, therefore, hope that the whole subject may be considered, and that, at all events, a trial may be made by building a few barracks according to the design given in the revised suggestions of the Army Sanitary Commission.

Committee to report on village sanitation.

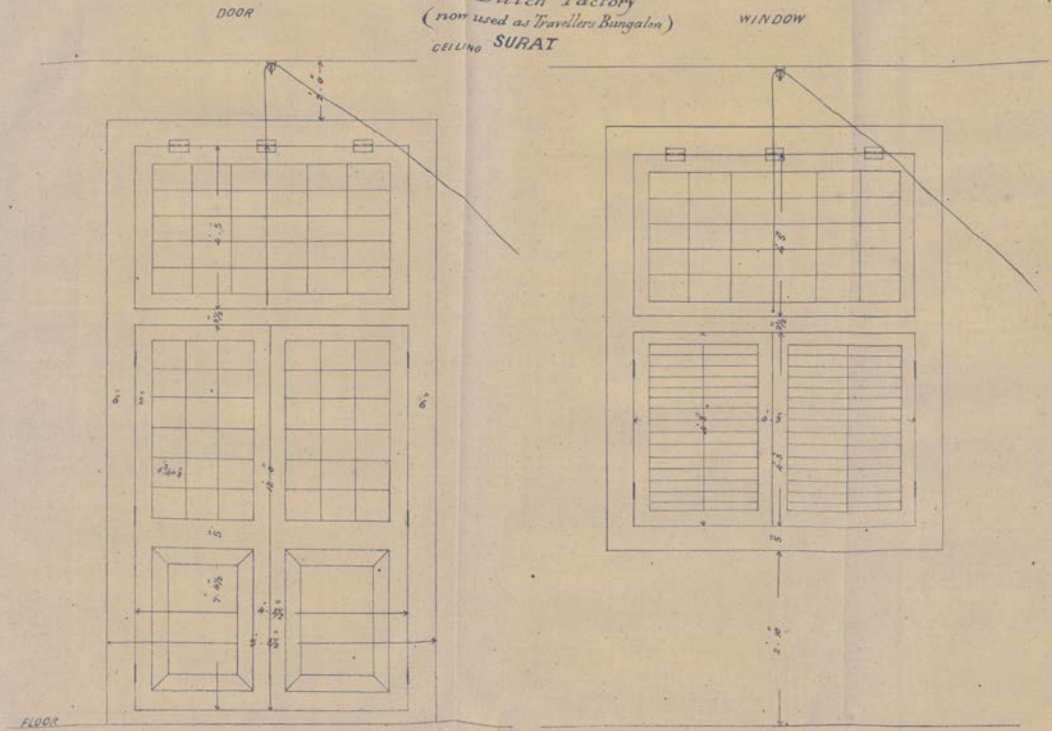
195. During the year the Committee appointed by Government in its Resolution No. 1154, dated 29th March 1886, assembled at Poona to consider the Draft Bill regarding village conservancy prepared by the Remembrancer of Legal Affairs, and submitted a report to Government.

Proposal to restrict provisions of Act to villages containing not less then 500 inhabitants.

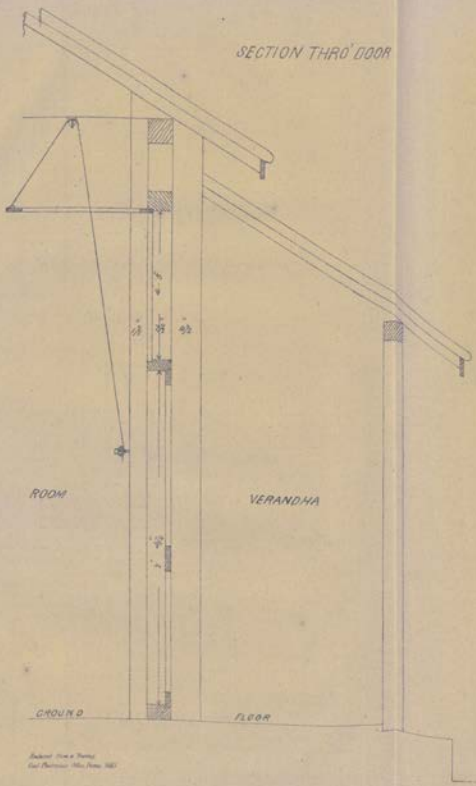
196. As the provisions of the Bill have not as yet been made public, I do not feel at liberty to discuss the question in this report further than to say that I most earnestly hope that a proposal which was made to the Committee, that the Village Conservancy Act should be restricted to villages containing not less than 500 inhabitants, will not be sanctioned by Government; for out of 24,578 total villages in the Presidency there are 8,997 containing above 500 inhabitants, and as the figures include 55 towns it will be seen that the Act would, if applied to the remainder, be enforced only to a very limited extent, and that the great majority of villages in this Presidency, *viz.*, 15,601, would not be included in its operations.

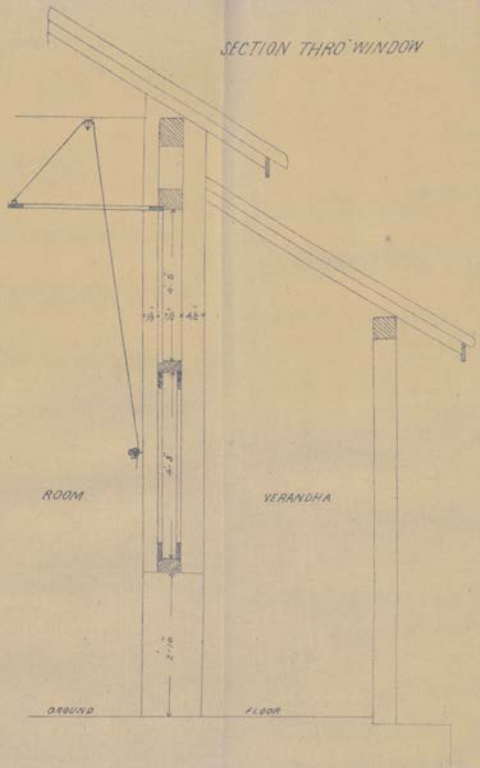
No. 1

Door and Window in Old Dutch Factory (now used as Travellers Bungalow) SURAT



No. 2


SECTION THRO' DOOR
ROOM
VERANDHA
GROUND
FLOOR


SECTION THRO' WINDOW
ROOM
VERANDHA
GROUND
FLOOR

197. Disease is not confined to the large villages, and cleaning operations are as essential in small villages as in those containing a population of above 500 inhabitants; and the Act, if restricted to the latter, would be perfectly useless in arresting the ravages of epidemic disease, such as cholera.

Such a proposal would render Act nugatory.

198. If it is found absolutely necessary to restrict the operation of the Act, I suggest, for consideration, the advisability of classifying the villages into 3 classes :—

Suggestion regarding working of Act.

1. Those containing above 500 inhabitants.
2. Do. do. between 200 and 500 inhabitants.
3. Do. do. below 200 inhabitants.

To villages in the 1st class, strict conservancy rules might be applied; to those in the 2nd class, less stringent ones; and to those in the 3rd class, simple provision made for the protection of the drinking water-supply, the allotment of places to which alone the villagers should be allowed to resort for natural purposes, and the enforcement of cleanliness of surface around habitations.

199. I quite recognize the difficulties in the way of introducing such a measure, and that, whatever course is decided upon, it must be for some years tentative; but I hope an endeavour will be made to embrace all villages. What is required is *simple cleanliness*, and the attainment of this object is, in my opinion, not beyond just demands.

Such an Act must be at first tentative.

200. I must here notice the powerful support which this most important subject of village sanitation has received from Miss Nightingale, who in a most able letter addressed to the Joint Secretaries, Bombay Presidency Association, Bombay, and to the Poona Sarvajanik Sabha has shown how much may be done by the people themselves in assisting Government in this matter by influencing public opinion among their fellow-countrymen, and showing them the benefits to be derived from carrying out measures which have for their object improved health, and, therefore, greater happiness among the rural population of this Presidency.

Miss Nightingale's pamphlet.

201. At Ahmedabad, during the past year, the proposals made by Colonel Ducat, R.E., the Consulting Sanitary Engineer to Government, regarding the water-supply and sewerage of the City called forth very strong opposition, not only on the part of persons connected with the Municipality, but even from the Member of the Government of India who is the present Minister of Public Works.

Opposition to Colonel Ducat's proposal regarding water-supply and sewerage at Ahmedabad.

202. Although Sir Theodore Hope, in the memorandum he addressed to the President of the Municipality dated 25th October 1886, stated that he spoke in no official capacity, yet, as any one who has resided for any length of time in India will readily understand, Native gentlemen at Ahmedabad and in other towns in Gujarát have attached more weight to his utterances than they would have done if they had been made by a private individual, or than, in my opinion, they deserve.

Sir Theodore Hope's memorandum dated 25th October 1886.

203. As regards the proposal for water-supply, Colonel Ducat has submitted to Government a complete answer to the criticisms which were published in the memorandum and adopted by Sir Theodore Hope, and which are made, he says, "by a friend," whom he describes as "one of the ablest and most experienced Irrigation Engineers in India," but who evidently was not conversant with the local conditions which obtain at Ahmedabad, and whose criticisms, therefore, are based on imperfect knowledge of the subject.

Colonel Ducat's answer to the criticisms on the water-supply scheme by "one of the ablest and most experienced Irrigation Engineers in India."

204. It is satisfactory to be able to record that the Municipality have, by a considerable majority, agreed to the adoption of Colonel Ducat's No. 2 scheme, modified so as to provide only 10 gallons a head per diem; and Government in its Resolution, General Department, No. 1069, dated 1st April 1887, says: "This scheme appears to be judicious and sound, and, as such, merits the approval and sanction of Government."

Government considers Colonel Ducat's water-supply scheme sound and judicious, and expresses its approval of its adoption in a modified form by the Municipality.

205. As the well recommended by Colonel Ducat will be built before the approaching monsoon, it will be very quickly seen whether his views on this subject are correct or not. They were certainly borne out by the results of an experiment which I witnessed, and which is described in the following letter to the address of the President:—

His views will be very shortly put to the test.

206. No. $\frac{\text{C. S. E.}}{1}$ of 1887.

Camp Luwad, 26th February 1887.

FROM

COLONEL W. M. DUCAT, R. E.,
Consulting Sanitary Engineer to the Government of Bombay;

To

RA'O BAHÁDUR RA'NCHORELA'L CHOTA'LA'L, C.I.E.,
President, Ahmedabad Municipality.

SIR,

With reference to the letter I wrote to Government, under date 30th November 1886, in answer to Sir T. Hope's remarks on my proposals for the water-supply and sewerage of Ahmedabad, I have the honour to inform you that I think it right to put on record that, since I wrote the above referred to letter, I have seen the small well at Dhudheshwar tested, and am more than ever convinced that the well I recommended you to sink for the water-supply of your City will yield an ample and inexhaustible supply.

2. On the 28th ultimo I was present with the Sanitary Commissioner for the Government of Bombay, when the small well at Dhudheshwar was tested before you and other gentlemen. I personally checked all measurements and calculations, and satisfied myself of the correctness of the yield, as stated below. Before pumping was commenced, there was a depth of about 9 feet of water in the well. When the large fire-engine pump was set working, a carefully calculated yield of 60 gallons a minute was drawn off from the well, when the head of water in the well was lowered by 3 feet. After this regimen was fully established beyond all doubt, a second pump was brought into action, and the yield from the well raised to 100 gallons a minute, when the head of water was lowered only 8″ (eight inches) more, or 3′ 8″ (three feet eight inches) in all, and was maintained steadily at this so long as the pump could be kept going, showing most clearly that the constant yield from that small well under a loss of head of 3 feet 8 inches was 100 gallons a minute. No more pumping power was available, so that the further yield from the well could not be actually tested, but from the results obtained there is not the least doubt that, with a proper steam pump, 200 gallons a minute could be safely and continually drawn from that small well.

3. As the well of 25 feet diameter, proposed for your City supply, is more than 114 times larger than the small test well, the yield of 100 gallons a minute from the small well, which we actually saw pumped, will from the larger well be equivalent to a supply of more than 79 gallons per head per diem to your population of 130,000 persons, allowing your pumps to work 15 hours a day; and the yield of 200 gallons per minute from the small well, which, though we did not actually see from want of pumping power, it would be perfectly safe to reckon on, will give an equivalent from the larger well of 158 gallons per head per diem to your City; and as you only propose a supply of 20 gallons a head, you may rest assured you have 7 or 8 times as much water as you require to draw on.

4. In my letter to Government, I do not think I mentioned the fact that I had a line of levels run from the water in the well at Dhudheshwar to the running water in the river opposite it, and found the levels identical, showing that the source of supply of both is the same, and that the supply from the well can never be exhausted so long as there is any water running in the river; and this at once disposes of the theory that the well might get worked out after a series of years, and yield less than it does now.

5. Sir T. Hope's letter has, I think, done so much good that it has brought forward all the objections to my proposals that the experience of an able Irrigation Engineer could suggest, assuming his own conditions as favourable to his objections. I have shown that the conditions, which alone can support his objections, do not exist in this case, and not one of his objections remains unanswered.

I have, &c.,

(Signed) W. M. DUCAT, Colonel, R.E.,
Consulting Sanitary Engineer."

Sir Theodore Hope's recommendation to his Ahmedabad friends.

207. As regards the question of removal of sullage, Sir T. Hope's "recommendation to his Ahmedabad friends is (1) to have nothing to do with underground drainage properly so called, (2) to retain and make more perfect the hand removal of nightsoil, and (3) to undertake also the surface removal of sullage, and its conveyance to a safe distance from the City."

Misapplication of the term "underground drainage."

208. The term "underground drainage" is never used by sanitary engineers, or sanitary officers, in the sense it is used in the above quotation. "Drainage" means the provision of channels for the sole conveyance of storm-water, either falling on the surface or percolating through the sub-soil; whilst sewerage means a system of "sewers," or channels for the removal of water which has been fouled in domestic use, and of urine of men and animals, as well as of nightsoil, which may or may not, according to circumstances, be admitted into them, so that, in ordinary sanitary language, Sir T. Hope's advice—to have nothing to do with "underground drainage"—would mean to have nothing to do with sub-soil drains, although from the context it is evident sewerage is meant as the system to be avoided.

The impracticability of the third recommendation of Sir Theodore Hope.

209. If I may do so without trespassing on the respect due to his high office, I would venture to say that, in my opinion, the third recommendation made by Sir T. Hope at once stamps the memorandum as the production of an amateur, who has never gone into the subject scientifically; and I am glad to say that so able and practical a man as Ráo Bahádur Ranchorelál Chotálál, C.I.E., the President, has published a statement which affords the most conclusive reply to Sir T. Hope's third recommendation, and shows how utterly impracticable it is on the score of expense alone.

The pail system has only been applied at privies, and not for removal of liquid sullage.

210. Sir T. Hope says "the surface removal of sullage amounts to nothing more, in reality, than what is well known in Europe as the pail system, which is not a theory, but a fact;" but I would point out that the pail system in Europe is only applied to the removal of nightsoil and urine from privies. It is in use at privies in Glasgow, Rockdale, Burmingham, Nottingham, Leeds, Halifax, Manchester, &c. In some towns, ashes are removed in the pails as well; but in no town has it ever been applied for the removal of all the household liquid refuse, bathing water, &c.

Proposal for hand removal of sullage from the residences of 19,621 families residing within City walls.

211. A proposal has lately been made to give effect to this recommendation as regards the hand removal of the sullage from the residences of about 19,621 of the 32,397 families residing within the City walls at Ahmedabad, who live in houses where there are no khalkuwas, in which the urine, bathing water, and kitchen liquid refuse can run. I have opposed this proposal, which, I believe, will be no improvement on the existing faulty conditions.

The results of giving effect to such a proposal.

212. If the scheme could be properly worked out, there must be a receptacle of some kind provided at each house, which must be sufficiently large to hold the whole of household liquid refuse, and which must stand outside each house. It must hold all the bathing water used by the inmates as well as the water which has been used in cooking, and, finally, it must hold the urine. Then some one in each house must empty this receptacle, and carry its contents by pailsful to the municipal tub, which it is proposed should stand in the street where municipal employés would have to be stationed to lift the sullage from the tub and deposit it (as proposed) into an eka (a cart drawn by one bullock), from which, again, it would have to be lifted and deposited into the closed wagon at the tramway, and then after being taken out 3 miles be finally let out at the place of deposit. If all the household sullage is removed, the municipal tub must be of a very large size. If the tub is not speedily and thoroughly emptied (and, in practice, it would be impossible to empty it thoroughly), the offensive matter in it would speedily putrefy, and the stench would pervade the neighbourhood. But, supposing all the household sullage is *not* removed, and that only one or two pailsful are taken to the municipal tub, what is to become of the remainder? Is this to be allowed to remain in the receptacle and poison the residents, or is it to be thrown out on to the surface to evaporate or soak into the ground? Imagine what an amount of dirty water must, of necessity, be spilt at the house, round each tub in the street, at the place where the eka stands, and at the tramway. I hope that the ineffable nastiness of the proposal, as well as the expense entailed by it, will ensure its condemnation.

Recommendation to send Home Sir Theodore Hope's memorandum dated 25th October 1886 and memorandum of 2nd April 1887.

213. As I consider the cause of sanitary reform in India has been very seriously attacked in the memorandum under reference, I earnestly hope that Government will be pleased to send it Home, together with a further one, dated 2nd April 1887, to the address of the President, in order to show the great difficulties which are from unexpected quarters placed in the way of carrying out, in India, structural works which have been devised in accordance with true principles of sanitation, as well as for the information of the Army Sanitary Commission, whose opinion, I would respectfully solicit, may be obtained as to whether the advice offered by the sanitary advisers to Government on the questions of water-supply and sewerage at Ahmedabad is sound or not. This seems to be necessary, as Sir T. Hope has seen fit to impugn it in para. 13 of his memorandum dated 25th October 1886.

Some good results of the memoranda by Sir T. Hope.

214. These memoranda have, however, been attended by some good results, as they have called forth able minutes from Native gentlemen connected with the Municipality, who have fully profited by their study of the invaluable memoranda of the Army Sanitary Commission which have done and are doing such real and tangible good in India by instructing members of Native Municipalities in the principles of true sanitation. No one can read the able memoranda published by the President, Ráo Bahádur Ranchorelál Chotálál, C.I.E., without being struck with the intimate knowledge he has acquired of the subject; and it is most encouraging to see that another Municipal Commissioner, Ráo Sáheb A. V. Kathavate, in his interesting minute on the proposal to carry out the hand removal of sullage, says: "I am of opinion that all such measures are makeshifts,—the one really effective method of removing foul water being that of taking it away by gravitation by means of permanent drains." It is very satisfactory, then, to see that all the members of the Municipality have not been misled by these memoranda; and I earnestly hope that, in spite of them, we may yet see Ahmedabad provided with an efficient system of sewers, which, I am confident, will promote the public health in a far greater degree than the impracticable arrangement proposed by Sir Theodore Hope.

Sanitary estimate of towns and villages.

215. In obedience to the instructions conveyed in Government Resolution, General Department, No. 3497, dated 26th October 1886, there will be found in the Appendix a tabular statement embodying information, under the heads of "Drainage," "Water," and "Domestic Cleansing," as to the sanitary estimate

of towns and villages inspected by the Deputy Sanitary Commissioners and Civil Surgeons during their tour.

Water-supply. Rivers.

216. The water-supply throughout the Presidency may be described as being generally of fair quality, though at all times and in too many places liable to contamination from surface filth. If it is derived from flowing streams, or from holes dug during the fine weather in the bed of rivers, the greatest care is necessary to prevent any impurity from the village itself finding its way into the stream. All washing of clothes, watering cattle, burning of bodies, &c., &c., should be rigorously forbidden up stream; and the practice introduced during the late famine at the relief camps, by many engineers, of building a ramp of sand, the top of which was defended by bramble bushes, across the bed of the river above and below that part of the bed from which the drinking water was drawn, might, with but little expenditure of labour, be advantageously followed in very many villages which are situated on the banks of rivers and streams, and which are dependent on them for their water-supply.

Tanks.

217. In my opinion, the use of tank water for drinking purposes by human beings ought to be absolutely forbidden. If a tank is the only source of drinking water, it is always possible to construct a well near its margin so as to ensure a certain amount of filtration through the soil. It is not, in my opinion, safe to drink the water from a reservoir constructed at some distance from a town until it has been filtered, and I think filter-beds should form part of every water-supply scheme devised by officers of the Irrigation Department.

Wells.

218. I have already in para. 104 stated my opinion that all wells should be domed over, so as to protect the water from the action of sunlight and from air-borne impurity finding its way into the water. There is also much need for a well being especially set apart for the low-caste people in every village. In very many parts of the country this is done; but in villages where there is only one well, they are often put to great straits for their drinking water.

Legislation required before effective measures can be taken for preserving the sources of drinking water.

219. I anticipate that the register of water-supply lately introduced by the Director of Agriculture will have the effect of drawing attention to the wants of the low-caste people in this matter, and thus benefit the rural population of the Presidency to a very great extent. District officers always do what they can to preserve the purity of the water-supply throughout the country; but until the people are more educated, and are systematically taught the danger of polluting the sources of their drinking water, much advance without legislation cannot, I fear, be expected in this direction.

Drainage.

220. As regards drainage, there are, in most villages, no drains of any description, and the storm-water flows off or stagnates according to the level of the site. In a few of the main streets of the better class of villages there are open roadside gutters, but no town or village has any proper system of sewers.

Domestic cleansing.

221. As regards domestic cleansing, some attempt is made, in municipal towns, to enforce surface cleanliness; but in villages, where there is no establishment of any kind, all filth remains untouched until the villagers hear of the approach of some district officer, when a hasty attempt is made to clean up the main streets; but the back slums are never cleaned, and the filth in and around houses is seldom or ever removed.

Aid afforded by officers of the Department.

222. I have, as usual, in bringing this, the last annual report I shall write as Sanitary Commissioner, to a conclusion, the pleasing duty of bringing prominently to the notice of Government the aid which I have received from the officers of the Department, who have one and all during the year worked well, and exhibited zeal and devotion in the performance of their respective duties.

T. G. HEWLETT,
Deputy Surgeon General,
Sanitary Commissioner.

APPENDIX I.

Sanitary Estimate of Villages and Towns in the Bombay Presidency inspected by the Deputy Sanitary Commissioners in 1886.

Collectorate.	Táluka.	Places inspected.		Water.	Drainage.	Domestic Cleansing.
		Towns.	Villages.			
1	2	3	4	5	6	7
				Western Registration District.		
Khándesh.	Páchora ...	1	...	From river and wells ...	Surface drainage only.	.....
	Jámner ...	1	...	Do. do. ...	Do. do. ...	.....
Thána.	Thána ...	1	...	From Pokhrán and other tanks.	Do. do. ...	.....
	Panvel ...	1	...	From tanks and wells ...	Do. do. ...	.....
	Bhiwndi...	1	...	From Viral Tank, distributed by pipes.	Do. do. ...	.....
	Váda ...	1	...	From wells; tank water is not used for drinking purposes.	Do. do. ...	.....
	Sháhápur	1	...	From wells; pavement round the parapet is wanted; in many cases the privies are far too close to the wells.	Do. do. ...	.....
	Murbád ...	1	...	Do. do. ...	Do. do. ...	.....
	Pen ...	1	...	From a tank	Do. do. ...	.....
				Central Registration District.		
Poona.	Haveli ...	...	16	7 from step-wells, 5 from river, 4 stand-pipes, Khadakvásla Canal.	.....	Steps of wells to be closed, surface cleanliness to be attended to, trench latrines established. In some of the villages prickly-pear to be cut down. In one village the canal bank is used for natural purposes, &c.
	Sirúr ...	1	...	River and wells good ... 2 wells and the river Ghodnadi. Supply with pipes from a well is in course of construction.	Surface drainage and cleanliness are carefully attended to.	Surface cleanliness to be attended to, and trench latrines to be used.
				2 from river and the rest from wells and "áds" (an ád is a deep narrow-mouthed well generally inside a house compound, or inside a house itself.)		Trench latrines would be preferable to the filthy masonry ones. Dung-hill near burial-ground should be levelled and covered with fresh earth, and nightsoil removed to a greater distance. Surface cleanliness to be attended to, trench latrines to be established, and a large number of "áds" to be closed.
	Purandhar.	...	1	Wells	.....	Surface cleanliness to be attended to, and trench latrines to be used.
	Khed ...	1	...	River and one step-well.	.....	Trench latrines required, surface cleanliness to be carried out properly.
			13	9 from rivers and the rest from wells and "áds."	.....	Surface cleanliness to be attended to, and trench latrines used.

Collectorate.	Táluka.	Places inspected. Towns.	Places inspected. Villages.	Water.	Drainage.	Domestic Cleansing.
1	2	3	4	5	6	7
				Central Registration District—continued.		
Poona—*contd.*	Junnar ...	1	...	River and 500 "áds" and 16 pipes.	.....	Latrines are a necessity; trench latrines might be used in properly selected places round the town.
			10	Rivers and "áds" and wells.	.....	Trench latrines to be used and surface cleanliness to be attended to.
Ahmednagar.	Párner ...	...	5	2 from river and "áds" 3 from step wells and "áds."	.....	Trench latrines required and surface cleanliness to be attended to.
	Nagar ...	1	...	One step-well, 64 "áds" and 1 aqueduct.	Surface drainage ...	The aqueduct water to be filtered, step well closed, and dry earth to be used in latrines to absorb a portion of the urine and ablution water.
		1	...	Aqueduct—quantity insufficient.	Surface drainage imperfect.	A proper system of drainage urgently required, drinking water filtered, cisterns covered, covered in gutters opened in their whole length, dry earth used in latrines and privies to absorb urine and ablution water. Washing of persons and clothes near cisterns prohibited.
		...	5	From wells and "áds"...	.....	Trench latrines to be dug.
	Karjat ...	...	7	From nalás and wells ...	.....	Surface cleanliness to be attended to, and trench latrines to be used.
	Shrígonda.	...	3	From nalás, "áds" and step wells.	.....	Do. do.
	Jámkhed .	...	1	From 3 wells	.....	Do. do.
	Sangamner	1	...	River	Surface drainage imperfect.	Latrines of standard pattern required; meantime trench latrines have been opened. Washing and bathing in the river should be performed below the town, and no intramural burial allowed.
			13	6 from rivers, and the rest from nalás and "áds."	.....	Surface cleanliness to be attended to, and trench latrines used.
	Akola ...	1	...	River	.....	Surface cleanliness and trench latrines used. Washing and bathing in the river prohibited above the town.
			2	Do.	.....	Do. do.
Sátára.	Jávli ...	...	19	10 from river; the rest from step wells, springs and nalás.	.....	Steps of wells to be closed, surface cleanliness attended to, trench latrines used, washing in the river to be prohibited.
	Sátára ...	...	3	Rivers and wells ...	.....	Surface cleanliness attended to, and trench latrines used.
	Wái ...	1	...	River and 400 "áds." The river is *fouled* by men and animals above the town.	.....	Water-supply after filtration. Trench latrines round the outskirts of the town. Ground along the banks of the river kept clean. Bathing and washing above the town prohibited.
			11	3 from rivers and rest from wells and "áds."	.....	Surface cleanliness attended to, and trench latrines used.

Collectorate.	Táluka.	Places inspected. Towns.	Places inspected. Villages.	Water.	Drainage.	Domestic Cleansing.
1	2	3	4	5	6	7
				Central Registration District—continued.		
Sátára—*contd.*	Koregaon .	...	4	1 river; rest from nalás and wells.	.....	Surface cleanliness attended to, and trench latrines used; steps of well closed.
	Phaltan ...	...	5	Nalás and step-wells ...	.....	Surface cleanliness and trench latrines; steps of well closed.
Ratnágiri.	Bhor ...	...	1	River and step wells ...	.....	Do. do.
	Vengurla .	...	...	20 stand-pipes, 13 cisterns, and many "áds."	.....	Surface cleanliness attended to, and trench latrines used.
	Devgad ...	...	1	40 wells	.....	Do. do.
	Ratnágiri .	1	...	15 stand-pipes, water from Nachan Tank.	.....	Do. do.
	Dápoli ...	...	1	5 stand-pipes and 3 step wells.	.....	Do. do.
	Málvan ...	...	1	From wells	.....	Do. do.
				Southern Registration District.		
Belgaum.	Gokák ...	...	1	River water. Fair ...	Surface drainage. Fair.	Fair.
Dhárwár.	Dhárwár, .	...	3	Tank water. Bad... ...	Bad	Bad.
	Kalghatgi and Hángal.	...	3	Well water. Scanty ...	Do.	Do.
			3	Do. Bad... ...	Do.	Do.
				Eastern Gujarát Registration District.		
Broach	Broach, Ámod, and Jambusar.	2	3	Water-supply is generally fair. Enough number of drinking wells exist to suffice for the wants of the people. In Broach City, river water is also used for drinking by the poorer classes, and rain water stored in tanks by the better classes.	There are no drains of any kind. Monsoon flood water rapidly finds its way out. Bathroom and other household water is led under ground, or thrown on roadsides, or dries up in the open.	Excepting in Broach City and the Municipal town of Jambusar, where municipal establishments exist for daily cleaning, in other places there is no special provision, and, on the whole, the general state of cleanliness of such places was bad.
Kaira .	Mehmadabad, Kapadvanj, Nadiád and Thásra.	4	14	Drinking water is obtained in almost all places from draw-wells. In some places, as in village Sarsavni, there are no drinking wells, and the people store the rain water in tanks. All the towns inspected are provided with a fair number of drinking wells generally in good repair; some require general repairs and drains to remove waste water.	Ditto ...	Of the municipal towns the general state of cleanliness was good. No arrangement of daily cleaning exists in villages or non-municipal towns as Thásra, which are occasionally cleaned.
Panch Maháls	Jhálod and Dohad.	2	...	A small portion of the population of both these towns use taláo water for drinking purposes. The taláo water generally is dirty and unfit for such use. There are also a sufficient number of drinking wells, and a greater part of the population drink well water. The wells are mostly in fair repair with clean precincts: some require drains for removal of waste water.	Ditto ...	Dohad Town Municipality has an establishment for daily cleaning, and its general condition was fair, though there is room for much improvement. Jhálod Town has no Municipality, and there is no arrangement of daily cleaning, and its general condition, on the whole, was bad.

Collectorate.	Táluka.	Places inspected.		Water.	Drainage.	Domestic Cleansing.
		Towns.	Villages.			
1	2	3	4	5	6	7
				Sind Registration District.		
Karáchi.	Dádú ...	...	3	From wells. None are protected. They are chiefly kutcha.	No drainage in these villages.	No attempt made at cleansing.
	Johi ...	...	1	From wells. None are protected.	None	Village cleaned up by the people under orders of Pancháyat. No establishment.
	Kotri ...	1	18	From wells and the river Indus. The wells are unprotected, and the river water is very impure from admixture with sewage, sand, and clay.	None of the villages are drained. There is an attempt to drain Kotri town. But no fixed plan is followed.	Little is done to cleanse the villages; many are very dirty. Kotri is a municipal town, and is kept fairly clean.
	Sujával ...	...	8	From wells and canals. The wells are not protected. Many are kutcha. The water in many places is brackish.	None	Little is done towards cleansing the small villages. Sujával is looked after by a Pancháyat, and is fairly clean.
	Mirpur Batoro.	1	7	From wells, most of which are kutcha; none are protected. There is one good well at Mirpur Batoro.	None, excepting in the town of Mirpur Batoro, where there are a few kutcha storm-water gutters.	The villages are not cleansed. Mirpur Batoro is a municipal town. House refuse is collected in vessels, and thrown into the streets at night. Sweepings are used to fill in hollows and excavations.
	Jati ...	...	7	From kutcha wells and canals. The water becomes very brackish, and in places is very bad.	None	Little is done towards cleansing; and of these villages the largest, Magol Bin, is a scattered irregular place, and would be very difficult to keep in good order. It is under a Pancháyat.
	Sháhbandar.	...	8	Chiefly from kutcha wells. There is but one pucka in all the villages. None are protected, and the water is bad. Water is also obtained from a canal.	None	Little is done towards cleansing these villages. They are all very small. Large heaps of cutchra are found everywhere.
	Ghorábári .	...	8	Chiefly from kutcha wells, also from the canals. The water is bad, and in no way protected.	None	Little is done towards cleansing these villages. They are all small.
	Mánjhand .	1	13	From kutcha and pucka wells and from the Indus. None of the wells are protected. The water would be good if protected.	None, excepting in Mánjhand town, where there are a few rough open drains which act imperfectly.	Mánjhand is a municipal town. There is a small conservancy establishment. Little is done towards keeping the villages clean.
	Tatta ...	1	6	Tatta is chiefly supplied by tanks around the town. They are very filthy. The Indus supplies all the villages.	None	Tatta town is municipal. The cutchra is removed to two sites in the immediate suburbs. Noticed much of this rubbish accumulated, and appeared to be a large admixture of animal excreta. The people residing in the neighbourhood complained bitterly to me of the nuisance so occasioned. The villages are not cleansed.

Collectorate.	Táluka.	Places inspected. Towns.	Places inspected. Villages.	Water.	Drainage.	Domestic Cleansing.
1	2	3	4	5	6	7
				Sind Registration District—continued.		
Karáchi—*continued.*	Sehwan ...	1	3	Bad, from filthy ponds and kutcha wells.	None	Bubak is a municipal town. Sweepings are removed outside the town. The latrines are dirty and neglected, as indeed is every sanitary matter. The villages are seldom cleansed.
Hyderabad.	Hyderabad	...	6	Canals and wells. None are protected.	None	Not cleansed.
	Dighri ...	...	6	From canals and wells. Wells not protected.	None	Do.
	Tando ...	1	7	From wells, all kutcha, and from canals impure, not protected in any way.	None	Tando is a municipal town. Sweepings are used in filling in excavations and hollows. The villages are not cleansed.
Shikárpur.	Sukkur ...	1	6	From wells and canals. The water in this district is good, but none of its sources are protected in any way. Sukkur town is supplied chiefly by the Indus. A new water-supply is under consideration.	None in any of the villages. Sukkur town has been made the subject of special reports. The drainage is very defective.	No sanitary arrangement for villages. Sukkur town is municipal. All sanitary arrangements are defective. However, drainage, water-supply &c., are all under consideration.
	Naushóhro.	...	8	From wells and river Indus. Well water is good, but the wells are not protected in any way.	None ...	No special arrangements.
	Rato-dero .	...	7	From wells. Water good, but unprotected.	None ...	Do.
	Kambar ...	...	8	Do.	None ...	Do.
	Lárkhána .	1	6	From wells, tanks, canals; water is good, but unprotected in any way.	None in the villages. There are some open kutcha drains in Lárkhána.	No special arrangements for the villages. Lárkhána is a municipal town, and is comparatively clean.
	Nasirabad.	...	8	From wells and canals. Water is good, but not protected in any way.	None ...	No special arrangements.
	Labdarya .	...	5	From canals and wells. Water good, but not protected in any way.	None ...	No special sanitary arrangements.
	Mehar ...	...	9	Do. do. ...	None ...	No special arrangement for any of the villages, excepting for Mehar. Here a small conservancy establishment is maintained by the Panchayat.
	Kakar ...	...	7	Do. do. ...	None ...	No special sanitary arrangements.

From Reports by Civil Surgeons.

Collectorate.	Number of Towns inspected.	Number of Inspection Reports.	Drinking Water.	Drainage.
Násik ...	9	16	Obtained from river, wells, tanks. General quality good. Some wells are liable to soakage, and are said to cause guineaworm.	Practically *nil*. Surface drains badly constructed.
Thána ...	1	1	Do. from wells	Do.

From Reports by Civil Surgeons—continued.

Collectorate.	Number of Towns inspected.	Number of Inspection Reports.	Drinking Water.	Drainage.
Kolába ...	2	2	Obtained from tank and river. At Panvel a new water scheme costing Rs. 8,000 is in execution. River water at Pen said to be good.	Practically *nil*. Surface drains badly constructed.
Ahmednagar .	3	5	Do. from river and wells: quality reported good.	Do.
Poona ...	11	20	Do. from tank, river and wells. At Jejuri water is distributed by pipes. At Poona from Khadakvásla. Water needs filtration.	Practically *nil*. At Poona City there are a large number of sewers, which are, for the most part, out of order, and have become elongated cesspools, which poison the air with gaseous emanations, &c.
Sholápur ...	4	7	Do. from wells and river. At Sholápur from Ekruk Tank.	Do. At Sholápur a system of sewers to carry away waste water is much required.
Sátára ...	3	3	Do. do.	No drains.
Ratnágiri ...	2	2	Do. do.	Do.
Belgaum ...	8	8	Do. do. Quantity plentiful ...	Do.
Kánara ...	4	6	Do. do. Quality good and plentiful, but subject to contamination.	Do.
Surat... ...	9	10	Do. do. Quality good. Rain water stored in tanks. River water ample, but indifferent.	Do. At Surat the question of drainage is under consideration. At Bárdoli there is a natural drainage.
Broach ...	3	5	Do. do. Quality fair. Quantity abundant.	*Nil*.
Kaira... ...	1	1	Do. do.	Do.
Ahmedabad ...	5	5	Do. do. At Viramgám water is liable to pollution.	Do.
Karáchi ...	6	11	Do. do. Quality good. Quantity abundant.	Do. At Karáchi there are a few drains, but they are of imperfect construction.
Hyderabad ...	8	14	Do. During the hot weather, canal water, and during the cold weather, well water is used; the latter is liable to contamination by soakage.	Do.
Shikárpur ...	10	18	Do. do. At Sukkur the water is obtained from the Indus. It is turbid and contaminated. A scheme for water-supply and sewerage is under consideration, and a rough estimate has been prepared by Colonel Ducat, R.E., to cost Rs. 4½ lákhs.	Do. At Sukkur plans and estimates are being prepared.
Total ...	89	134		

APPENDICES.

в 15—1 ср

GENERAL POPULATION AND VITAL STATISTICS.

ANNUAL FORM NO. I.—BIRTHS *registered in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1886.*

1	2	3	4			5			6	7	8
No.	Districts.	Population according to Census of 1881.	Number of Births registered.			Ratio of Births per 1,000 of Population.			Number of Males born to every 100 Females born.	Excess of Births over Deaths per 1,000 of Population.	Excess of Deaths over Births per 1,000 of Population.
			Male.	Female.	Total.	Male.	Female.	Total.			
	Western Registration District.										
1	Khándesh	1,237,231	23,423	21,388	44,811	18·93	17·29	36·22	109·51	7·91	....
2	Násik	781,206	14,667	13,480	28,147	18·78	17·25	36·03	108·80	13·41	....
3	Thána	807,267	11,557	11,100	22,657	14·31	13·75	28·06	104·12	7·16	....
4	City of Bombay	773,196	7,657	7,022	14,679	9·90	9·08	18·98	109·04	....	6·64
5	Kolába	482,830	7,446	7,105	14,551	15·42	14·71	30·14	104·80	9·99	....
	Central Registration District.										
6	Ahmednagar	751,228	16,691	15,497	32,188	22·22	20·63	42·85	107·70	16·24	....
7	Poona	900,621	16,305	14,860	31,165	18·10	16·50	34·60	109·72	12·56	....
8	Sholápur	582,487	13,348	12,451	25,999	22·92	21·71	44·63	105·51	20·27	....
9	Sátára	1,062,350	23,159	21,829	44,988	21·80	20·55	42·35	106·09	16·71	....
10	Ratnágiri	997,090	13,004	12,073	25,077	13·04	12·11	25·15	107·72	9·30	....
	Southern Registration District.										
11	Belgaum	884,014	18,076	17,745	35,821	20·92	20·54	41·46	101·87	18·27	....
12	Dhárwár	882,907	20,561	19,700	40,261	23·29	22·31	45·60	104·37	17·85	....
13	Bijápur	638,493	13,803	13,379	27,182	21·62	20·95	42·57	103·17	23·55	....
14	Kánara	421,840	6,762	6,227	12,989	16·03	14·76	30·79	108·59	2·06	....
	Eastern Gujarát Registration District.										
15	Surat	614,198	12,765	12,030	24,795	20·78	19·59	40·37	106·11	14·02	....
16	Broach	326,930	6,841	6,334	13,175	20·92	19·37	40·30	108·00	10·59	....
17	Kaira	894,800	16,278	14,365	30,643	20·23	17·85	38·08	113·31	12·99	....
18	Panch Mahále	255,479	4,506	4,251	8,757	17·64	16·64	34·28	105·99	12·83	....
19	Ahmedabad	856,324	17,433	15,854	33,287	20·36	18·51	38·87	109·96	13·08	....
	Sind Registration District.										
20	Karáchi	478,688	6,965	5,694	12,659	14·55	11·90	26·45	122·32	8·28	....
21	Hyderabad	754,624	11,290	8,676	19,966	14·96	11·49	26·46	130·13	7·12	....
22	Thar and Párkar	203,344	4,277	3,506	7,783	21·03	17·24	38·27	121·99	22·30	....
23	Shikárpur	852,986	14,695	11,976	26,671	17·23	14·04	31·27	122·70	14·43	....
24	Upper Sind Frontier	124,181	1,867	1,435	3,302	15·03	11·56	26·59	130·10	14·16	....
	Total for the Presidency ..	16,454,414	303,376	278,177	581,553	18·44	16·90	35·34	109·06	12·17	....

ANNUAL FORM NO. II.—DEATHS *registered in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1886.*

1	2	3	4	5			6	7			8		
No.	Districts.	Area in Square Miles.	Average Population per Square Mile.	Number of Deaths registered.			Number of Males died to every 100 Deaths of Females.	Ratio of Deaths per 1,000 of Population.			Mean Ratio of Deaths per 1,000 during previous five years.		
				Male.	Female.	Total.		Male.	Female.	Total.	Male.	Female.	Total.
	Western Registration District.												
1	Khándesh	9,944	124·42	18,760	16,268	35,028	115·22	29·03	26·92	28·31	29·01	26·31	27·98
2	Násik	5,940	131·61	9,454	8,220	17,674	115·01	23·79	21·42	22·62	30·84	24·61	29·06
3	Thána	3,936	205·12	8,977	7,898	16,875	113·70	21·58	20·19	20·90	26·09	26·07	26·05
4	City of Bombay	22	35,145·27	10,237	9,555	19,812	107·13	22·67	20·98	25·62	24·57	33·59	28·17
5	Kolába	1,811	266·61	5,068	4,708	9,776	107·65	20·76	19·72	20·24	19·66	17·74	18·91
	Central Registration District.												
6	Ahmednagar	6,606	112·69	10,671	9,320	19,991	114·05	27·96	25·21	26·61	30·16	28·21	29·20
7	Poona	5,348	168·40	10,319	9,506	19,855	108·57	22·74	21·34	22·04	25·95	24·20	25·08
8	Sholápur	4,521	128·84	7,420	6,771	14,191	109·58	25·17	23·54	24·36	27·17	25·43	26·31
9	Sátára	4,988	212·98	13,641	13,607	27,238	100·18	25·60	25·08	25·64	26·22	25·18	25·71
10	Ratnágiri	3,922	254·22	8,173	7,630	15,803	107·12	17·28	14·56	15·85	17·34	13·93	15·55
	Southern Registration District.												
11	Belgaum	4,657	185·53	10,130	9,901	20,031	102·31	23·31	23·05	23·19	27·23	25·95	26·60
12	Dhárwár	4,555	194·68	12,376	12,133	24,509	102·00	28·00	27·52	27·75	28·14	27·42	27·78
13	Bijápur	5,767	110·90	6,179	5,971	12,150	103·48	19·45	18·61	19·02	22·65	21·51	22·08
14	Kánara	3,911	107·85	6,422	5,700	12,122	112·67	28·80	25·67	28·73	28·18	23·36	28·26
	Eastern Gujarát Registration District.												
15	Surat	1,662	369·55	8,361	7,825	16,186	106·84	27·32	25·30	26·35	29·93	28·37	29·15
16	Broach	1,443	225·96	5,082	4,633	9,715	109·69	30·16	29·34	29·71	32·43	30·67	31·83
17	Kaira	1,609	560·18	10,613	9,480	20,193	110·75	24·87	25·34	25·09	28·37	28·07	28·55
18	Panch Mahále	1,613	158·38	2,739	2,742	5,481	99·80	20·81	22·96	21·45	18·99	17·43	18·23
19	Ahmedabad	3,821	224·10	11,766	10,316	22,082	114·06	26·78	24·74	25·79	29·42	26·90	28·19
	Sind Registration District.												
20	Karáchi	14,115	33·91	4,904	3,797	8,701	129·15	18·44	17·85	18·17	19·45	19·01	19·25
21	Hyderabad	9,039	83·57	8,173	6,426	14,599	127·19	20·67	18·50	19·34	16·23	14·42	15·28
22	Thar and Párkar	12,729	15·98	1,825	1,444	3,269	126·39	16·24	15·88	16·07	16·99	16·30	16·68
23	Shikárpur	10,001	85·29	7,959	6,402	14,361	124·32	17·26	16·33	16·84	16·99	16·35	16·69
24	Upper Sind Frontier	2,139	58·05	851	692	1,543	122·98	12·13	12·81	12·43	11·67	11·04	11·40
	Total for the Presidency ..	124,130	132·58	200,140	181,045	381,185	110·55	23·55	22·75	23·17	25·14	24·10	24·64

N.B.—Born dead are not included in this or any of the other statements.

ANNUAL FORM No. III.—DEATHS *registered in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the months of the year 1886.*

1	2	3												4	5
No.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November	December.	Total Deaths registered during the year.	No.
	Western Registration District.														
1	Khándesh	2,587	2,252	2,603	2,899	3,301	2,105	2,716	4,456	3,823	2,679	2,779	2,831	35,028	1
2	Násik	1,749	1,317	1,349	1,377	1,376	1,261	1,347	1,724	1,587	1,533	1,533	1,621	17,674	2
3	Thána	1,849	1,567	1,469	1,519	1,340	1,053	1,268	1,323	1,327	1,066	1,410	1,744	16,875	3
4	City of Bombay.. ..	1,693	1,609	1,677	1,691	1,857	1,661	1,696	1,561	1,630	1,692	1,596	1,539	19,812	4
5	Kolába	874	808	740	796	720	761	881	853	857	718	852	916	9,776	5
	Central Registration District.														
6	Ahmednagar	1,544	1,222	1,198	1,305	1,358	1,556	2,063	2,438	2,198	1,893	1,602	1,614	19,991	6
7	Poona	1,765	1,243	1,280	1,487	1,358	1,557	1,832	2,153	1,876	1,753	1,730	1,812	19,855	7
8	Sholápur	1,356	911	928	939	856	978	1,273	1,517	1,532	1,384	1,201	1,316	14,191	8
9	Sátára	2,168	1,742	1,830	2,005	2,038	2,139	2,769	2,849	2,789	2,463	2,216	2,209	27,228	9
10	Ratnágiri..	1,473	1,354	1,336	1,377	1,164	1,156	1,446	1,483	1,209	1,231	1,245	1,329	15,803	10
	Southern Registration District.														
11	Belgaum	1,495	1,328	1,448	1,670	1,564	1,778	2,032	1,934	1,731	1,703	1,566	1,722	20,031	11
12	Dhárwár	2,182	1,814	1,754	1,794	1,744	2,015	2,331	2,213	1,875	2,016	2,197	2,574	24,509	12
13	Bijápur	1,080	798	755	778	813	859	1,143	1,325	1,293	1,161	1,061	1,084	12,150	13
14	Kánara	1,272	1,153	1,048	907	782	896	1,130	1,000	948	939	941	1,106	12,122	14
	Eastern Gujarát Registration District.														
15	Surat	1,298	1,197	1,394	1,289	1,361	1,207	1,266	1,448	1,437	1,321	1,454	1,523	16,186	15
16	Broach	859	728	700	791	772	647	581	752	841	944	1,080	969	9,715	16
17	Kaira	1,521	1,505	1,670	1,713	1,710	1,381	1,532	2,000	1,812	1,776	1,834	1,739	20,103	17
18	Panch Mahále	452	400	402	485	382	369	290	424	439	531	709	589	5,481	18
19	Ahmedabad	2,174	1,995	1,982	1,823	1,765	1,180	1,318	1,786	1,877	1,950	1,991	2,236	22,082	19
	Sind Registration District.														
20	Karáchi	957	895	780	748	672	602	519	648	612	656	761	851	8,701	20
21	Hyderabad	1,700	1,833	1,713	1,329	1,059	780	769	813	840	974	1,291	1,498	14,599	21
22	Thar and Párkar ..	370	345	441	381	346	229	169	168	167	202	172	298	3,269	22
23	Shikárpur	1,265	1,185	1,322	1,315	1,344	1,185	1,093	921	1,097	1,114	1,313	1,207	14,261	23
24	Upper Sind Frontier ..	134	121	130	137	129	122	117	114	114	154	141	128	1,543	24
	Total for the Presidency.	33,788	29,325	29,858	30,543	29,810	27,460	31,511	35,973	33,010	31,853	32,586	34,563	3,31,185	
	Ratio of deaths per 1,000 in each month	2·05	1·78	1·81	1·86	1·81	1·67	1·91	2·19	2·06	1·94	1·98	2·11	23·17	

ANNUAL FORM No. IV.—DEATHS *registered according to Age in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1886.*

1	2	3		4		5		6		7		8		9		10		11		12		13
No.	Districts.	Under 1 year.		1 year and under 5.		5 and under 10.		10 and under 15.		15 and under 20.		20 and under 30.		30 and under 40.		40 and under 50.		50 and under 60.		60 and upwards.		No.
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
	Western Registration District.																					
1	Khándesh	4,924	4,110	5,063	4,675	765	679	417	335	329	484	991	1,079	1,224	1,011	1,337	897	1,574	1,061	2,116	1,937	1
2	Násik	2,724	2,091	1,927	1,893	449	404	238	211	229	256	632	722	721	640	727	488	763	540	1,034	976	2
3	Thána	1,469	1,244	1,537	1,564	496	469	216	103	277	297	886	942	1,142	838	1,038	613	938	734	977	1,014	3
4	City of Bombay.. ..	3,169	2,730	1,420	1,551	222	251	187	350	379	669	1,150	1,244	1,194	772	889	490	800	553	1,137	939	4
5	Kolába	1,022	774	808	854	221	225	129	118	156	158	431	512	537	412	551	407	634	566	579	682	5
	Central Registration District.																					
6	Ahmednagar	3,498	2,605	2,397	2,068	415	431	323	324	312	416	714	717	623	568	503	474	654	576	1,142	1,161	6
7	Poona	2,517	1,877	2,331	2,132	365	337	222	248	265	371	715	897	782	676	788	651	994	870	1,370	1,447	7
8	Sholápur	2,349	1,391	1,339	1,746	301	233	159	185	166	243	421	526	497	407	481	361	525	487	691	728	8
9	Sátára	3,598	3,039	3,427	3,733	638	604	313	271	290	348	659	807	731	767	904	757	1,002	1,013	1,950	2,202	9
10	Ratnágiri	898	737	978	1,009	342	328	227	218	261	291	752	747	766	713	906	630	1,101	887	1,942	2,070	10
	Southern Registration District.																					
11	Belgaum	2,409	1,999	2,335	2,579	532	516	301	248	252	311	740	878	737	755	804	502	747	621	1,283	1,492	11
12	Dhárwár	3,619	2,989	2,575	2,727	499	530	307	266	293	420	833	1,248	965	981	1,026	717	1,013	886	1,196	1,378	12
13	Bijápur	1,263	1,551	1,364	1,463	266	282	167	160	150	224	251	554	429	451	483	218	470	339	606	666	13
14	Kánara	1,366	1,185	567	639	242	217	171	148	208	220	805	970	994	713	838	430	615	454	681	738	14
	Eastern Gujarát Registration District.																					
15	Surat	1,877	1,665	1,833	1,818	417	423	255	179	254	257	534	638	662	656	748	502	745	494	1,031	1,193	15
16	Broach	1,493	1,412	1,160	1,038	177	149	111	87	128	147	267	356	304	394	455	317	491	329	432	434	16
17	Kaira	2,411	2,705	2,854	2,399	297	261	243	169	227	175	671	653	816	668	957	655	1,047	735	1,240	1,350	17
18	Panch Mahále	591	603	597	585	183	148	85	76	83	89	174	252	229	221	253	184	279	195	265	345	18
19	Ahmedabad	2,950	2,600	2,590	2,167	420	374	268	205	360	301	1,020	924	1,093	887	1,090	768	1,013	869	970	1,101	19
	Sind Registration District.																					
20	Karáchi	1,276	1,069	437	421	149	113	123	82	132	178	453	440	614	388	567	321	470	301	683	484	20
21	Hyderabad	1,480	1,418	678	641	276	207	258	194	224	299	961	896	1,102	870	1,123	654	862	469	1,031	802	21
22	Thar and Párkar ..	406	369	157	140	81	103	73	34	66	57	174	135	163	115	175	102	190	99	242	229	22
23	Shikárpur	1,789	1,402	805	746	333	266	187	147	203	250	833	908	990	774	954	549	782	512	960	788	23
24	Upper Sind Frontier ..	209	175	96	87	29	36	24	15	16	23	81	65	96	76	104	73	88	39	168	103	24
	Total for the Presidency.	49,856	42,395	39,558	38,470	8,160	7,586	4,995	4,523	5,448	6,448	15,324	17,104	17,440	14,719	17,828	11,872	17,877	13,579	23,045	24,349	
	Ratio per 1,000 living ..	217·19	185·87	40·90	44·18	6·54	6·65	4·75	5·47	8·01	10·61	10·17	11·59	13·33	12·71	22·22	16·03	35·95	27·01	60·69	60·37	

ANNUAL FORM No. V.—DEATHS *registered according to* CLASSES *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1886.*

1	2	3					4					5				
		POPULATION ACCORDING TO CENSUS OF 1881.					NUMBER OF DEATHS REGISTERED.					RATIO OF DEATHS PER 1,000 OF POPULATION.				
No.	Districts.	Mahomedans.	Hindus.	Christians.	Other classes.	Total.	Mahomedans.	Hindus.	Christians.	Other classes.	Total.	Mahomedans.	Hindus.	Christians.	Other classes.	Total.
	Western Registration District.															
1	Khándesh	92,297	1,143,533	1,146	255	1,237,231	2,239	32,696	5	88	35,028	24·26	28·59	4·36	..	28·31
2	Násik	35,294	742,377	2,644	391	781,206	670	16,831	16	157	17,674	18·98	22·66	6·05	..	22·62
3	Thána	36,471	728,256	39,059	2,521	807,307	682	18,340	756	97	19,875	18·70	21·06	19·36	27·08	22·99
4	City of Bombay	158,713	520,069	42,327	52,087	773,196	4,829	13,044	677	1,262	19,812	30·43	25·08	15·99	24·23	25·62
5	Kolába	23,811	455,425	721	2,803	482,830	474	9,230	15	57	9,776	19·91	20·27	18·96	20·33	20·24
	Central Registration District.															
6	Ahmednagar	39,592	706,565	4,821	250	751,228	1,097	18,552	30	312	19,991	27·71	26·26	6·22	..	26·61
7	Poona	42,036	846,811	9,503	2,271	900,621	998	18,498	100	259	19,855	23·74	21·84	10·52	..	22·07
8	Sholapur	43,967	537,643	625	252	582,487	887	13,096	7	201	14,191	20·17	24·36	11·20	..	24·36
9	Sátára	26,712	1,024,626	846	124	1,052,350	858	25,997	4	469	27,338	23·37	25·28	4·51	..	25·64
10	Ratnágiri	71,051	922,745	3,275	19	997,090	1,085	14,541	49	129	15,803	15·27	15·76	14·66	..	15·85
	Southern Registration District.															
11	Belgaum	66,282	791,277	6,322	153	854,014	1,335	18,490	105	51	20,031	20·90	23·37	16·61	..	23·19
12	Dhárwar	100,622	779,875	2,356	54	882,907	2,686	21,626	75	112	24,509	26·70	27·73	31·83	..	27·75
13	Bijápur	67,066	570,775	625	27	638,493	1,172	10,953	8	17	12,150	17·48	19·19	12·80	..	19·02
14	Kánara	24,282	382,997	14,509	52	421,840	674	11,045	374	29	12,122	27·75	28·83	25·78	..	28·73
	Eastern Gujarát Registration District.															
15	Surat	55,547	545,370	622	12,659	614,198	1,351	14,583	4	248	16,186	24·33	26·74	6·43	16·59	26·35
16	Broach	67,248	256,505	115	3,062	326,930	1,918	7,745	2	50	9,715	28·52	30·19	17·39	16·33	29·71
17	Kaira	72,954	730,063	1,045	138	804,800	1,627	18,339	26	1	20,193	22·30	25·37	24·88	7·25	25·09
18	Panch Mahále	16,030	239,336	44	39	255,479	350	5,122	..	..	5,481	22·42	21·02	..	..	21·45
19	Ahmedabad	83,942	769,966	1,529	887	856,324	2,221	19,825	17	19	22,082	26·46	25·75	11·12	21·42	25·79
	Sind Registration District.															
20	Karáchi	393,317	79,819	4,674	1,073	478,883	0	1,958	21	115	8,701	16·80	24·53	4·49	..	18·17
21	Hyderabad	621,945	132,199	428	62	754,634	10,795	3,670	4	189	14,559	17·36	27·76	9·35	..	19·34
22	Thar and Párkar	157,634	45,092	14	4	202,744	1,749	1,212	..	308	3,269	11·10	26·53	..	..	16·07
23	Shikárpur	690,167	162,004	736	79	852,986	11,025	3,268	6	62	14,361	15·97	20·17	8·15	..	16·84
24	Upper Sind Frontier	110,381	13,558	230	12	124,181	1,227	305	1	10	1,543	11·12	22·49	4·35	..	12·43
	Total for the Presidency ...	3,107,171	13,128,587	138,326	80,330	16,454,414	58,625	316,076	2,301	4,183	381,185	18·87	24·08	16·63	52·07	23·17

N.B.—This and all the other statements refer to Natives only, and not to Europeans and Eurasians. Hindus include Hindus of all castes, Jains, Brahmo or Prárthana Samáj, Sikhs, low castes and aboriginals. In the Western, Central, Southern and Gujarát Registration Districts, aboriginals are included among Hindus, and in Sind among Mahomedans. "Other classes" include Jews, Pársis, Budhists, and unspecified.

ANNUAL FORM No. VI.—DEATHS *registered from* DIFFERENT CAUSES *in the* DISTRICTS *and* TOWNS *of the* BOMBAY PRESIDENCY, *during the year 1886.*

1	2	3	4	5	6	7	8					9	10	11							12
							INJURIES.							RATIO OF DEATHS PER 1,000 OF POPULATION.							
							Suicide.												From all Causes.		
No.	Districts and Towns.	Population according to Census of 1881.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Males.	Females.	Wounding or Accident.	Snake-bite or killed by wild beasts.	Total.	All other Causes.	Total Deaths from all Causes.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other Causes.	For the year.	Mean of previous five years.	No.
	A—DISTRICTS.																					
	Western Registration District.																					
1	Khándesh	1,187,766	21	276	27,570	6,195	17	17	201	23	258	799	34,118	0·02	0·23	23·21	4·37	0·22	0·67	28·72	28·24	1
2	Násik	732,671	..	9	13,326	1,730	5	5	92	19	121	1,241	16,437	..	0·01	18·18	2·36	0·17	1·69	22·42	28·99	2
3	Thána	750,601	8	13	14,471	407	21	25	228	167	441	1,174	16,514	0·01	0·02	18·58	0·52	0·57	1·51	21·17	20·20	3
4	Kolába	459,299	41	34	7,624	223	4	5	100	38	147	1,213	9,382	0·09	0·07	16·60	0·70	0·32	2·64	20·42	18·52	4
	Central Registration District.																					
5	Ahmednagar	704,940	..	..	14,587	1,726	2	10	52	9	73	2,150	18,536	..	..	20·69	2·45	0·10	3·04	26·29	28·31	5
6	Poona	753,245	46	9	13,283	1,110	25	17	157	37	236	1,492	16,176	0·06	0·01	17·63	1·47	0·31	1·99	21·47	25.16	6
7	Sholápur	489,561	4	6	9,351	826	8	8	84	12	112	1,052	11,351	0·01	0·01	19·10	1·69	0·23	2·15	23·19	24·13	7
8	Sátára	1,010,868	13	1	20,146	2,199	11	24	160	41	236	3,361	25,906	0·01	..	19·93	2·18	0·23	3·32	25·67	25·70	8
9	Ratnágiri	975,527	..	29	9,128	1,764	4	7	128	79	218	4,216	15,355	..	0·03	9·36	1·81	0·22	4·32	15·74	15·37	9
	Southern Registration District.																					
10	Belgaum	800,824	..	7	10,110	4,051	11	35	145	32	223	4,508	18,920	..	0·01	12·48	5·04	0·27	5·57	23·37	26·32	10
11	Dhárwár	791,836	..	75	14,643	4,552	23	47	123	35	218	5,585	22,499	..	0·09	17·79	5·75	0·23	4·62	23·38	27·94	11
12	Bijápur	620,045	..	9	7,926	1,419	7	29	108	16	160	2,415	11,928	..	0·01	12·78	2·29	0·26	3·89	19·24	22·16	12
13	Kánara	397,450	..	77	7,046	725	8	18	140	38	204	3,533	11,885	..	0·19	17·73	1·82	0·51	8·89	29·15	28·57	13
	Eastern Gujarát Registration District.																					
14	Surat	491,125	1	12	10,676	1,651	8	18	168	52	246	646	13,232	..	0·02	21·74	3·36	0·50	1·32	26·94	29·10	14
15	Broach	278,170	2	7	7,731	278	2	2	68	19	91	309	8,418	..	0·02	27·81	1·00	0·33	1·11	30·28	32·43	15
16	Kaira	737,186	1	4	15,151	2,206	12	30	189	62	293	740	18,395	..	0·01	20·55	2·99	0·40	1·00	24·95	28·24	16
17	Panch Mahále	229,143	..	28	4,681	80	3	8	47	43	101	57	4,947	..	0·12	20·37	0·35	0·44	0·25	21·53	18·03	17
18	Ahmedabad	884,934	..	..	13,624	1,432	11	20	144	53	228	769	16,053	..	..	19·94	2·09	0·33	1·12	23·49	24·17	18
	Sind Registration District.																					
19	Karáchi	410,356	..	7	5,691	101	4	5	165	98	272	667	6,738	..	0·02	13·87	0·24	0·66	1·63	16·42	18·65	19
20	Hyderabad	709,429	..	34	12,298	104	6	6	224	198	434	366	13,136	..	0·05	17·21	0·15	0·61	0·55	18·57	14·94	20
21	Thar and Párkar ..	200,516	..	..	2,955	30	..	..	44	67	111	129	3,205	..	..	14·64	0·15	0·55	0·64	15·98	16·28	21
22	Shikárpur	769,915	..	120	12,919	73	9	14	219	84	326	159	12,697	..	0·16	15·81	0·09	0·42	0·21	16·49	16·07	22
23	Upper Sind Frontier ..	112,839	..	12	1,196	12	1	2	18	4	25	23	1,270	..	0·11	10·60	0·11	0·22	0·22	11·26	10·22	23
	Total of Districts ..	14,337,234	137	709	254,522	32,025	302	347	3,004	1,221	4,774	34,630	326,857	0·01	0·05	17·75	2·23	0·33	2·42	22·79	23·99	

ANNUAL FORM NO. VI.—DEATHS *registered from* DIFFERENT CAUSES *in the* DISTRICTS *and* TOWNS *of the* BOMBAY PRESIDENCY *during the year 1886*—continued.

1	2	3	4	5	6	7	8					9	10	11							12
							Injuries.							Ratio of Deaths per 1,000 of Population.							
							Suicide.												From all Causes.		
Number.	Districts and Towns.	Population according to Census of 1881.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Males.	Females.	Wounding or accident.	Snake-bite or killed by wild beast.	Total.	All other causes.	Total deaths from all causes.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other causes.	For the year.	Mean of previous five years.	Number.
	B.—TOWNS.																				
	Khándesh District.																				
1	Dhulia	18,449	..	..	183	77	..	..	1	..	1	32	293	..	..	9·92	4·18	0·05	1·73	15·89	17·29	1
2	Nandurbár	6,841	..	1	131	25	..	..	3	..	3	..	160	..	0·14	19·15	3·65	0·45	..	23·39	27·92	2
3	Chopda	13,932	..	..	289	3	..	1	5	..	6	..	293	..	..	20·74	10·22	0·43	..	21·39	20·67	3
4	Nasirabad	10,243	..	..	157	..	..	..	2	..	2	..	159	..	..	15·33	..	0·19	..	15·52	27·24	4
	Násik District.																				
5	Násik	24,101	2	..	324	89	1	..	5	..	6	176	583	0·08	..	13·44	3·32	0·25	7·30	24·39	46·51	5
6	Yeola	17,685	..	..	316	49	..	..	4	1	5	145	515	..	..	17·87	2·77	0·28	8·20	29·12	34·66	6
7	Dévlál Cantonment ..	1,085	..	..	11	..	..	..	1	..	1	13	25	..	..	10·13	..	0·92	11·97	23·02	10·78	7
8	Málegaon do.	3,780	..	..	65	5	..	..	2	..	2	47	119	..	..	17·20	1·32	0·53	12·43	31·48	39·95	8
	Thána District.																				
9	Thána	14,456	..	..	167	8	..	..	1	..	1	29	205	..	..	11·55	0·55	0·07	2·01	14·18	10·51	9
10	Kalyán	12,910	..	..	107	6	1	..	5	..	6	39	156	..	..	8·29	0·31	0·46	3·02	12·08	9·14	10
11	City of Bombay	773,196	17	18	5,843	1,465	49	28	287	8	372	12,097	19,812	0·02	0·02	7·56	1·89	0·48	15·65	25·62	28·17	11
	Kolába District.																				
12	Panvel	10,351	..	..	77	10	..	1	4	..	5	26	118	..	..	7·44	0·97	0·48	2·51	11·40	8·79	12
13	Alibág	6,376	..	..	78	8	..	..	3	..	3	45	135	..	..	12·23	1·25	0·47	7·21	21·17	10·97	13
14	Mahád	6,864	..	..	92	22	..	..	5	..	5	22	141	..	..	13·52	3·23	0·73	3·23	20·73	10·14	14
	Ahmednagar District.																				
15	Ahmednagar	32,903	..	..	335	123	3	5	9	1	18	613	1,089	..	..	10·18	3·74	0·55	18·63	33·10	37·71	15
16	Sangamner	8,796	..	..	199	21	..	..	5	..	5	120	285	..	..	15·80	2·39	0·57	13·64	32·40	33·88	16
17	Ahmednagar Cantonment	4,539	..	..	46	3	..	..	..	..	..	32	81	..	..	10·02	0·65	..	6·97	17·65	18·87	17
	Poona District.																				
18	Poona City	99,622	4	5	1,025	160	..	1	53	1	55	1,318	2,557	0·04	0·05	10·29	1·61	0·55	13·23	25·77	26·76	18
19	Junnar	10,373	..	..	90	38	..	..	2	1	3	174	305	..	..	8·68	3·66	0·29	16·77	29·40	20·76	19
20	Poona Cantonment ..	25,042	..	..	342	42	3	2	10	..	15	282	681	..	..	13·66	1·68	0·59	11·26	27·19	19·84	20
21	Kirkee do.	3,560	..	..	32	4	..	2	7	..	9	81	126	..	..	8·99	1·12	2·53	22·75	35·39	13·46	21
	Sholápur District.																				
22	Sholápur	69,899	..	..	1,329	113	2	1	14	..	17	242	1,801	..	..	22·19	1·89	0·28	5·71	30·07	31·63	22
23	Bársi	16,126	..	..	259	22	..	..	7	..	7	114	507	..	..	22·26	1·36	0·43	7·07	31·13	40·24	23
24	Pandharpur	16,910	..	..	319	136	1	1	7	..	9	73	537	..	..	18·86	8·04	0·43	4·32	31·75	56·58	24
	Sátára District.																				
25	Sátára	29,028	..	..	424	192	..	..	2	..	2	121	739	..	..	14·60	6·61	0·07	4·17	25·45	25·03	25
26	Karád	10,778	..	..	163	17	..	..	4	2	6	68	254	..	..	15·12	1·58	0·56	6·30	23·56	28·56	26
27	Wái	11,675	..	..	164	36	..	..	2	..	2	87	289	..	..	14·05	3·09	0·17	7·45	24·76	24·39	27
	Ratnágiri District.																				
28	Vengurla	8,947	..	..	35	1	..	..	..	..	..	179	215	..	..	3·91	0·11	..	20·01	24·03	26·15	28
29	Ratnágiri	12,616	..	..	146	7	..	..	2	..	2	78	233	..	..	11·57	0·55	0·16	6·18	18·47	21·88	29
	Belgaum District.																				
30	Belgaum	23,115	1	..	199	49	1	2	8	2	13	163	425	0·04	..	8·61	2·12	0·56	7·05	18·39	21·33	30
31	Gokák	10,307	..	..	94	54	..	..	1	..	1	116	265	..	..	9·12	5·24	0·97	11·25	25·71	30·08	31
32	Athni	11,186	..	..	95	130	1	1	2	..	4	29	258	..	..	8·49	11·62	0·25	2·59	23·06	27·27	32
33	Belgaum Cantonment ..	9,582	..	..	46	38	..	..	6	..	6	14	154	..	..	4·08	3·97	0·63	6·68	16·07	14·92	33
	Dhárwár District.																				
34	Dhárwár	27,191	..	1	333	9	2	3	12	1	18	443	804	..	0·04	12·25	0·33	0·66	16·29	29·56	24·46	34
35	Hubli	36,677	..	..	313	80	2	3	11	1	17	233	643	..	..	8·54	2·18	0·46	6·35	17·53	26·28	35
36	Gadag-Bettigeri ..	17,001	..	..	142	126	1	1	10	..	12	44	324	..	..	8·35	7·41	0·71	2·59	19·06	25·99	36
37	Ránebennur	10,902	..	..	97	24	1	..	6	..	7	141	269	..	..	9·51	2·33	0·69	13·32	26·37	32·04	37
	Bijápur District.																				
38	Bijápur	11,424	..	..	91	55	..	..	7	..	7	8	161	..	..	7·97	4·81	0·61	0·70	14·09	Not available	38
39	Kaládgi	7,624	..	..	27	31	..	..	..	..	..	3	61	..	..	3·84	4·41	..	0·43	8·68	15·80	39
	Kánara District.																				
40	Kárwár	13,761	..	..	133	2	..	..	6	..	6	137	283	..	..	10·03	0·15	0·44	9·96	20·57	19·54	40
41	Kumta	10,629	..	1	126	21	..	1	1	..	2	104	254	..	0·09	11·85	1·98	0·19	9·78	23·89	27·85	41
	Surat District.																				
42	Surat	109,844	..	..	1,705	93	5	2	22	..	29	869	2,786	..	..	16·33	0·85	0·27	7·91	25·36	30·82	42
43	Bulsár	13,229	..	..	109	45	1	3	5	1	10	4	168	..	..	8·24	3·40	0·76	0·30	12·70	13·74	43
	Broach District.																				
44	Broach	37,281	..	3	608	5	..	1	15	..	16	216	848	..	0·08	16·31	0·13	0·43	5·79	22·74	26·26	44
45	Jambusar	11,479	..	1	188	252	1	3	5	1	8	..	449	..	0·09	16·38	21·95	0·70	..	39·12	40·40	45
	Kaira District.																				
46	Kaira	12,640	..	..	171	66	1	1	6	..	8	39	284	..	..	13·53	5·22	0·63	3·08	22·46	25·72	46
47	Nadiád	28,304	..	2	683	120	1	1	9	2	13	28	851	..	0·07	24·31	4·24	0·46	0·99	30·07	33·96	47
48	Borsad	12,228	..	..	235	..	..	1	3	1	5	..	241	..	..	19·22	..	0·41	..	19·63	21·12	48
49	Kapadvanj	14,442	..	..	352	32	2	..	12	..	14	25	423	..	..	24·37	2·21	0·97	1·73	29·29	33·54	49

ANNUAL FORM No. VI.—DEATHS *registered from* DIFFERENT CAUSES *in the* DISTRICTS *and* TOWNS *of the* BOMBAY PRESIDENCY *during the year 1886*—continued.

1	2	3	4	5	6	7	8					9	10	11								12
							Injuries.							Ratio of Deaths per 1,000 of Population.								
							Suicide.													From all Causes.		
No.	Districts and Towns.	Population according to Census of 1881.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Males.	Females.	Wounding or Accident.	Snake-bite or wild beasts.	Total.	All other causes.	Total deaths from all causes.	Cholera.	Small-pox.	Fever.	Bowel-complaints.	Injuries.	All other causes.	For the year	Mean of previous five years.	No.
	B.—TOWNS.																					
	Panch Mahâls District.																					
50	Godhra	13,342	..	2	147	21	..	..	4	..	4	22	196	..	0·15	11·02	1·57	0·30	1·65	14·69	16·59	50
51	Dohad	12,394	..	..	300	8	2	..	6	..	8	13	333	..	..	24·93	0·65	0·65	1·05	27·27	23·80	51
	Ahmedabad District.																					
52	Ahmedabad	124,767	6	..	3,165	62	2	2	10	..	14	1,278	4,525	0·05	..	25·37	0·50	0·11	10·24	36·27	48·23	52
53	Goghs	7,963	..	..	132	73	...	..	4	2	6	..	211	..	..	18·69	10·33	0·85	..	29·87	26·67	53
54	Viramgám	18,990	..	..	583	243	...	1	6	1	8	23	857	..	..	30·70	12·80	0·42	1·21	45·13	40·77	54
55	Dholka	17,716	..	..	243	80	...	..	3	1	4	80	407	..	..	13·72	4·51	0·23	4·51	22·97	24·97	55
56	Ahmedabad Cantonment.	1,940	..	..	29	...	...	..	..	..	..	..	29	..	..	14·95	..	..	..	14·95	17·90	56
	Karáchi District.																					
57	Karáchi	68,332	..	..	1,030	105	2	..	37	..	39	789	1,963	..	..	15·07	1·54	0·57	11·55	28·73	22·56	57
	Hyderabad District.																					
58	Hyderabad	45,195	..	45	1,053	...	...	1	17	..	18	307	1,423	..	0·99	23·30	..	0·40	6·79	31·48	25·02	58
	Thar and Párkar District.																					
59	Umarkot	2,838	..	..	55	...	..	..	..	..	..	9	64	..	..	19·45	..	..	3·18	22·63	33·19	59
	Shikárpur District.																					
60	Shikárpur	42,496	..	5	728	9	1	1	7	..	9	54	805	..	0·11	17·13	0·21	0·21	1·22	18·94	21·12	60
61	Sukkur	27,389	..	23	359	54	2	..	34	1	37	86	562	..	0·84	13·10	1·97	1·95	3·26	20·52	21·25	61
62	Lárkháná	13,188	..	..	262	2	..	..	4	..	4	29	297	..	..	19·86	0·16	0·30	2·20	22·52	29·13	62
	Upper Sind Frontier District.																					
63	Jacobabad	11,352	..	..	198	27	1	..	2	..	3	45	273	..	..	17·44	2·38	0·26	3·96	24·05	20·17	63
	Total of Towns ..	2,105,604	30	107	26,928	4,587	89	70	731	28	918	21,758	54,328	0·01	0·05	12·79	2·18	0·44	10·33	25·80	29·07	
	Total for the Presidency ..	16,454,414	167	876	281,450	36,612	291	417	3,735	1,249	5,692	56,368	381,185	0·01	0·05	17·10	2·23	0·35	3·43	23·17	24·64	

N. B.—Districts A in this statement do not include the population or deaths of Towns B. In all the other statements "Districts" include Towns.
Total population for the Presidency includes Europeans, Eurasians, and fighting men numbering 11,576.

ANNUAL FORM No. VII.—DEATHS *registered from* CHOLERA *in the Districts of the* BOMBAY PRESIDENCY *during each month of the year 1886.*

1	2	3		4		5												6			7			8	9
		Circles of Registration.		Villages.														Total.			Ratio of Deaths per 1,000 of Population.				
No.	Districts.	Number in each District.	Number from which deaths from Cholera were reported.	Number in each District.	Number from which deaths from Cholera were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December	Male.	Female.	Total.	Male.	Female.	Total.	Mean Ratio per 1,000 of previous five years.	No.
	Western Registration District.																								
1	Khándesh	26	2	2,679	2	..	..	..	..	..	..	8	10	3	..	..	..	12	9	21	0·01	0·01	0·02	2·61	1
2	Násik	16	1	1,629	..	2	..	..	..	..	..	..	..	..	..	..	..	2	..	2	0·01	..	..	2·74	2
3	Thána	12	2	1,880	2	7	..	..	..	..	..	..	..	..	1	..	..	5	3	8	0·01	0·07	0·01	1·59	3
4	City of Bombay	1	1	..	..	3	2	..	1	2	2	..	..	3	..	1	3	12	5	17	0·03	0·02	0·02	0·73	4
5	Kolába	10	2	1,191	4	4	..	..	..	..	..	..	..	22	15	..	..	16	25	41	0·06	0·10	0·08	1·31	5
	Central Registration District.																								
6	Ahmednagar	14	..	1,231	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3·02	6
7	Poona	12	4	1,181	7	50	..	..	..	..	..	..	..	..	..	..	..	24	26	50	0·05	0·06	0·05	2·12	7
8	Sholápur	10	1	709	1	4	..	..	..	..	..	..	..	..	..	..	..	1	3	4		0·01	0·01	2·31	8
9	Sátára	15	2	1,310	4	13	..	..	..	..	..	..	..	..	..	..	..	7	6	13	0·01	0·01	0·01	1·46	9
10	Ratnágiri	10	..	1,295	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·19	10
	Southern Registration District.																								
11	Belgaum	11	1	1,073	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	1	..	..	..	1·91	11
12	Dhárwár	18	..	1,231	..	..	..	..	..	...	..	..	..	..	..	..	..	..	..	..	..	..	..	1·41	12
13	Bijápur	16	..	1,189	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·95	13
14	Kánara	13	..	1,107	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·21	14
	Eastern Gujarát Registration District.																								
15	Surát	10	1	780	1	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	..	..	1·38	15
16	Broach	8	1	403	2	..	..	1	..	1	..	..	..	..	..	..	..	2	..	2	0·01	..	0·01	0·62	16
17	Kaira	11	1	577	1	..	..	..	..	1	..	..	..	..	..	..	..	1	..	1	..	..	..	0·35	17
18	Panch Máhâls	7	..	673	..	..	..	..	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·52	18
19	Ahmedabad	12	1	857	..	..	..	..	..	..	..	..	1	..	..	1	4	5	1	6	0·01	..	0·01	0·29	19
	Sind Registration District.																								
20	Karáchi	15	..	722	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2·12	20
21	Hyderabad	14	..	1,104	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·85	21
22	Thar and Párkar	8	..	72	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·13	22
23	Shikárpur	18	..	1,370	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·95	23
24	Upper Sind Frontier ..	4	..	142	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1·22	24
	Total for the Presidency ..	265	20	24,535	24	83	2	1	1	5	2	8	11	28	16	3	7	89	78	167	0·01	0·01	0·01	1·38	

Annual Form No. VIII.—DEATHS *registered from Small-pox in the* Districts *of the* Bombay Presidency *during each month of the year 1886.*

No.	Districts.	Circles of Registration: No. in each District.	Circles of Registration: No. from which deaths from Small-pox were reported.	Villages: No. in each District.	Villages: No. from which deaths from Small-pox were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total: Male.	Total: Female.	Total: Total.	No. of these Deaths among Children: Under 1 year.	No. of these Deaths among Children: Under 12 years.	Ratio of Deaths per 1,000 of Population: Male.	Ratio of Deaths per 1,000 of Population: Female.	Ratio of Deaths per 1,000 of Population: Total.	Mean ratio per 1,000 of previous five years.	No.
1	2	3		4		5												6			7		8			9	10
	Western Registration District.																										
1	Khándesh	26	15	2,679	63	7	12	22	30	46	21	26	30	4	10	12	57	137	140	277	93	168	0·22	0·23	0·22	0·42	1
2	Násik	16	6	1,629	6	1	2	1	..	..	2	1	1	..	..	..	1	4	5	9	7	2	0·01	0·01	0·01	0·32	2
3	Thána	12	4	1,880	7	1	4	3	3	1	1	..	..	..	..	..	..	7	6	13	4	7	0·02	0·01	0·02	0·64	3
4	City of Bombay.. ..	1	1	..	..	1	..	4	7	4	2	..	..	..	..	..	..	13	5	18	10	4	0·03	0·02	0·03	0·45	4
5	Kolába	10	6	1,191	18	3	8	7	5	1	6	1	2	..	1	..	..	13	21	34	8	23	0·05	0·08	0·07	0·41	5
	Central Registration District.																										
6	Ahmednagar	14	..	1,331	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·12	6
7	Poona	12	4	1,181	5	..	2	1	..	4	2	2	1	..	1	..	1	9	5	14	6	8	0·02	0·01	0·02	0·51	7
8	Sholápur..	10	3	709	3	4	1	..	..	..	..	1	..	..	..	..	..	2	4	6	2	3	..	0·01	0·01	0·17	8
9	Sátára	15	1	1,340	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	0·31	9
10	Ratnágiri	10	5	1,295	16	8	5	2	3	5	..	6	..	..	..	..	..	13	16	29	6	4	0·03	0·03	0·03	0·47	10
	Southern Registration District.																										
11	Belgaum	11	4	1,073	4	..	..	1	..	2	..	1	2	..	..	1	..	5	2	7	1	..	0·01	..	0·01	0·72	11
12	Dhárwár	18	9	1,281	30	9	2	15	7	7	15	7	4	2	3	3	2	34	42	76	..	..	0·07	0·09	0·08	0·80	12
13	Bijápur	10	3	1,139	6	..	...	..	3	3	..	..	..	2	..	..	1	3	6	9	2	2	0·01	0·01	0·01	0·79	13
14	Kánara	13	8	1,107	30	13	5	11	9	23	10	3	3	1	..	..	..	45	33	78	3	5	0·20	0·16	0·18	0·87	14
	Eastern Gujarát Registration District.																										
15	Surat	10	3	780	7	..	..	..	..	2	2	1	..	2	..	1	4	8	4	12	4	7	0·03	0·01	0·02	0·48	15
16	Broach	8	5	403	4	..	2	1	1	1	1	4	..	..	..	1	..	6	5	11	4	6	0·03	0·03	0·03	0·09	16
17	Kairá	11	4	577	3	1	1	1	..	..	2	1	..	..	..	..	..	3	3	6	3	3	0·01	0·01	0·01	0·07	17
18	Panch Maháls	7	5	673	13	1	..	5	13	7	1	2	..	..	..	1	..	14	16	30	15	15	0·11	0·13	0·12	0·09	18
19	Ahmedabad	12	..	857	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·06	19
	Sind Registration District.																										
20	Karáchi	15	3	722	3	..	3	3	1	..	..	..	..	..	..	..	..	4	3	7	..	2	0·02	0·01	0·01	0·38	20
21	Hyderabad	14	6	1,104	18	4	5	5	6	19	20	8	5	5	..	1	1	39	40	79	19	45	0·10	0·12	0·10	0·41	21
22	Thar and Párkar ..	8	..	72	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·08	22
23	Shikárpur	18	14	1,370	64	12	18	13	13	27	22	12	6	2	2	9	12	85	63	148	40	55	0·18	0·16	0·18	0·03	23
24	Upper Sind Frontier ..	4	3	142	7	..	6	4	1	1	..	..	..	..	..	..	..	4	8	12	3	3	0·06	0·15	0·10	0·11	24
	Total for the Presidency.	285	112	24,535	319	66	76	99	102	153	107	78	54	18	17	29	79	448	428	876	231	362	0·05	0·05	0·05	0·04	

Annual Form No. IX.—DEATHS *registered from Fevers in the* Districts *of the* Bombay Presidency *during each month of the year 1886.*

No.	Districts.	Circles of Registration: No. in each District.	Circles of Registration: No. from which deaths from Fevers were reported.	Villages: No. in each district.	Villages: No. from which deaths from Fevers were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total: Male.	Total: Female.	Total: Total.	Ratio of Deaths per 1,000 of Population: Male.	Ratio of Deaths per 1,000 of Population: Female.	Ratio of Deaths per 1,000 of Population: Total.	Mean ratio per 1,000 of previous five years.	No.
1	2	3		4		5												6			7			8	9
	Western Registration District.																								
1	Khándesh	26	26	2,679	2,293	2,075	1,809	2,091	2,322	2,587	1,622	2,167	3,035	3,151	2,232	2,333	2,306	14,972	13,358	28,330	23·67	22·08	22·90	19·88	1
2	Násik	16	16	1,629	1,476	1,309	1,065	1,005	1,123	1,114	975	1,019	1,352	1,225	1,193	1,244	1,328	7,434	6,608	14,042	18·70	17·21	17·97	21·15	2
3	Thána	12	12	1,880	1,730	1,039	1,372	1,203	1,361	1,152	898	1,061	1,141	1,102	922	1,200	1,574	7,783	6,962	14,745	18·70	17·79	18·26	20·45	3
4	City of Bombay ..	1	1	..	..	550	550	539	533	575	515	464	406	416	476	423	396	3,037	2,806	5,843	6·58	9·10	7·56	7·16	4
5	Kolába	10	10	1,191	1,070	726	661	612	671	570	579	716	639	660	577	704	756	4,012	3,859	7,871	16·43	16·16	16·30	13·21	5
	Central Registration District.																								
6	Ahmednagar	14	14	1,331	1,242	1,164	895	891	989	1,039	1,188	1,593	1,862	1,650	1,449	1,209	1,107	8,027	7,080	15,107	21·04	19·15	20·11	19·31	6
7	Poona	12	12	1,181	1,108	1,241	910	945	1,115	1,016	1,174	1,343	1,014	1,437	1,294	1,282	1,392	7,645	7,127	14,772	16·80	16·00	16·40	16·77	7
8	Sholápur..	10	10	709	684	1,090	690	703	773	682	794	1,022	1,204	1,214	1,123	964	1,090	5,922	5,436	11,358	20·09	18·90	19·50	18·18	8
9	Sátára	15	15	1,340	1,264	1,602	1,412	1,465	1,604	1,605	1,585	2,022	2,090	2,079	1,864	1,681	1,798	10,442	10,455	20,897	19·61	19·73	19·68	18·45	9
10	Ratnágiri	10	10	1,295	1,206	892	839	828	874	715	680	845	801	734	693	703	705	4,778	4,531	9,309	10·10	8·65	9·34	8·41	10
	Southern Registration District.																								
11	Belgaum	11	11	1,073	976	707	696	786	982	885	928	1,008	975	888	853	826	919	5,265	5,279	10,544	12·11	12·29	12·20	12·58	11
12	Dhárwár	18	18	1,281	1,275	1,321	1,081	1,053	1,128	1,030	1,160	1,329	1,347	1,120	1,214	1,393	1,731	7,316	7,612	14,928	16·55	17·26	16·90	14·90	12
13	Bijápur	10	10	1,139	990	702	528	518	533	587	571	777	833	805	768	700	661	4,008	4,035	8,043	12·61	12·57	12·60	13·72	13
14	Kánara	13	13	1,107	1,064	708	687	671	555	452	524	650	599	585	564	574	681	3,787	3,523	7,310	16·98	17·71	17·33	16·17	14
	Eastern Gujarát Registration District.																								
15	Surat	10	10	780	739	1,026	964	1,122	1,011	1,047	939	1,013	1,104	1,107	905	1,111	1,150	6,388	6,192	12,580	20·87	20·09	20·48	21·40	15
16	Broach	8	8	403	389	725	635	676	696	688	550	508	653	735	833	858	875	4,442	4,085	8,527	26·36	25·78	26·08	26·90	16
17	Kaira	11	11	577	572	1,283	1,275	1,407	1,429	1,420	1,090	1,226	1,602	1,461	1,430	1,531	1,443	8,737	7,860	16,597	20·47	20·80	20·62	23·28	17
18	Panch Maháls	7	7	673	570	428	381	366	454	347	329	273	394	414	507	676	508	2,575	2,562	5,137	19·64	20·61	20·11	16·02	18
19	Ahmedabad	12	12	857	813	1,783	1,637	1,595	1,470	1,433	928	1,035	1,383	1,480	1,571	1,639	1,822	9,464	8,312	17,776	21·64	19·94	20·76	22·36	19
	Sind Registration District.																								
20	Karáchi	15	15	722	722	784	705	635	580	516	424	360	470	438	500	620	694	3,768	2,953	6,721	14·17	13·88	14·04	13·06	20
21	Hyderabad	14	14	1,104	1,104	1,588	1,721	1,611	1,251	937	664	607	641	724	893	1,214	1,412	7,375	5,886	13,261	18·11	16·94	17·60	12·85	21
22	Thar and Párkar ..	8	8	72	72	343	327	421	260	308	194	134	146	135	186	153	284	1,558	1,372	2,930	14·75	14·65	14·70	15·08	22
23	Shikárpur	18	18	1,370	1,370	1,186	1,106	1,268	1,250	1,207	1,060	970	822	1,013	1,037	1,241	1,129	7,398	5,970	13,368	16·05	15·23	15·67	14·52	23
24	Upper Sind Frontier ..	4	4	142	142	109	105	122	130	120	117	108	96	105	134	131	117	753	641	1,394	10·73	11·87	11·23	9·50	24
	Total for the Presidency.	285	285	24,535	22,871	25,311	22,060	22,623	22,193	22,084	19,499	22,230	25,799	25,733	23,308	24,565	26,036	146,986	134,464	281,450	17·30	16·90	17·10	16·70	

ANNUAL FORM No. X.—DEATHS *registered from* BOWEL-COMPLAINTS *in the* DISTRICTS *of the* BOMBAY PRESIDE
during each month of the year 1886.

1	2	3		4		5												6			7		
		Circles of Registration.		Villages.														Total.			Ratio of Deaths per 1,000 of Population.		
No.	Districts.	Number in each District.	Number from which deaths from Bowel-complaints were reported.	Number in each District.	Number from which deaths from Bowel-complaints were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Male.	Female.	Total.	Male.	Female.	Total.
	Western Registration District.																						
1	Khándesh	26	25	2,679	1,042	414	351	399	481	569	369	432	673	561	335	343	393	3,006	2,294	5,300	4·75	3·79	4·28
2	Násik	16	15	1,629	494	181	138	133	139	142	154	164	196	176	157	136	149	1,073	791	1,864	2·70	2·06	2·39
3	Thána	12	12	1,683	176	23	29	32	23	34	18	39	52	54	41	30	39	245	174	419	0·89	0·44	0·52
4	City of Bombay ..	1	1	.	..	127	89	100	100	129	125	150	152	129	116	105	143	836	629	1,465	1·80	2·03	1·89
5	Kolába	10	10	1,191	196	32	28	31	25	33	28	30	47	41	19	24	23	214	149	363	0·88	0·62	0·75
	Central Registration District.																						
6	Ahmednagar	14	14	1,331	513	144	117	124	118	118	127	205	216	218	168	151	167	1,031	842	1,873	2·70	2·28	2·49
7	Poona	12	12	1,181	330	109	88	75	94	100	93	141	154	137	125	115	115	759	595	1,354	1·67	1·34	1·50
8	Sholápur	10	10	706	265	95	102	99	63	68	68	110	132	118	105	80	61	568	499	1,067	2·03	1·73	1·88
9	Sátára	15	15	1,340	364	165	119	139	147	130	237	287	315	270	220	202	183	1,280	1,164	2,444	2·40	2·20	2·30
10	Ratnágiri	10	10	1,295	581	122	98	114	134	110	144	199	232	138	182	153	145	994	778	1,772	2·10	1·48	1·78
	Southern Registration District.																						
11	Belgaum	11	11	1,073	846	626	266	233	319	294	383	491	493	390	419	350	338	2,326	2,026	4,352	5·35	4·71	5·04
12	Dhárwár	18	18	1,231	915	418	343	318	324	336	443	541	445	374	398	393	401	2,601	2,191	4,792	5·83	4·96	5·42
13	Bijápur	10	10	1,139	394	138	76	90	82	80	94	140	185	139	158	147	176	318	687	1,505	2·57	2·14	2·35
14	Kánara	13	13	1,107	303	86	68	47	47	44	50	69	75	69	67	56	70	433	315	748	1·94	1·58	1·77
	Eastern Gujarát Registration District.																						
15	Surat	10	10	780	335	147	137	150	129	154	144	119	162	166	146	150	185	985	804	1,789	3·22	2·61	2·92
16	Broach	8	8	409	77	54	43	45	38	39	34	26	44	49	52	58	59	295	240	535	1·75	1·51	1·63
17	Kaira	11	10	577	278	174	180	170	181	193	190	226	318	258	214	163	157	1,260	1,164	2,424	2·95	2·68	2·81
18	Panch Mahále	7	7	678	51	13	11	5	7	9	9	11	10	15	5	9	5	59	50	109	0·46	0·40	0·43
19	Ahmedabad	12	11	867	263	176	178	170	141	128	74	116	178	160	171	194	198	1,037	853	1,890	2·36	2·04	2·21
	Sind Registration District.																						
20	Karáchi	15	13	722	70	8	13	12	14	26	17	13	24	22	17	16	24	115	91	206	0·43	0·43	0·43
21	Hyderabad	14	12	1,104	71	9	7	4	9	8	4	10	5	12	12	15	9	65	39	104	0·16	0·11	0·14
22	Thar and Párkar ..	8	4	72	21	1	..	4	5	12	..	1	2	1	..	1	3	15	15	30	0·13	0·16	0·15
23	Shikárpur	18	16	1,370	44	20	8	2	9	6	7	13	13	14	16	18	12	99	39	138	0·21	0·10	0·16
24	Upper Sind Frontier ..	4	8	142	11	5	..	..	3	2	1	4	6	2	8	4	4	31	8	39	0·44	0·15	0·31
	Total for the Presidency.	285	269	24,335	7,639	2,992	2,489	2,549	2,612	2,788	2,818	3,637	4,126	3,517	3,141	2,919	3,124	20,275	16,337	36,612	2·39	2·05	2·23

A.—VACCINE DEPARTMENT.

Statement No. I, showing Particulars of Vaccination in the Bombay Presidency during the year 1886-87.

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinations.				Re-vaccinations.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE WESTERN REGISTRATION DISTRICT.				Males.	Females.	Total.														
	KHÁNDESH COLLECTORATE—																				
1	Nandurbár Town	6,841	14,993·97	...	.....	...	...	*Vide*	Statement	No.	III.	...	...	...	...	...	...	...	...	10	1·46
2	Dhulia Town	18,449	10,023·23	1	P. 644 R. 3	578 1	1,222 4	1,226	1,222	936	243	1,222	4	...	100·	...	66·24	786	42·60	1	0·05
3	Chopda Town, Local Fund ...	13,932	29,234·36	1	228	244	472	472	472	272	200	472	...	...	100·	...	33·88	469	33·66	1	0·07
4	Nasirabad Town do. ...	10,243	61,266·54	1	P. 172 R. 3	147 ...	319 3	322	319	171	115	287	3	...	89·97	..	28·02	420	41·00	19	1·85
5	In the 22 Rural Circles, Local Fund	1,187,766	119·49	23	P. 18,209 R. 192	17,879 56	36,088 248	1,580	36,158	23,318	11,545	35,099	249	181	97·26	72·98	29·70	35,483	29·87	503	0·42
	Total ...	1,237,231	124·43	26	P. 19,253 R. 198	18,848 57	38,101 255	1,475	38,171	24,697	12,103	37,080	256	181	97·32	70·98	30·12	37,158	30·03	534	0·43
	NÁSIK COLLECTORATE—																				
6	Yeola Town	17,685	80,845·71	...	.....	...	...	*Vide*	Statement	No.	III.	...	...	...	...	...	...	..	...	15	0·85
7	Násik do.	24,101	48,528·85	1	P. 386 R. 17	425 ...	811 17	828	811	486	320	808	17	11	99·63	64·71	33·98	857	35·56	10	0·41
8	Devláli Cantonment	2,969		...	12	25	37	37	37	23	8	31	...	...	83·78	...	10·44	108	36·38	...	...
9	Málegaon Cantonment, Local Fund	3,780	...	...	71	60	131	131	131	93	37	131	...	...	100·	...	34·66	87	23·02	...	...
10	In the 12 Rural Circles, Local Fund	732,671	123·36	12	P. 9,595 R. 79	9,478 20	19,073 99	1,598	19,101	11,874	6,388	18,525	100	87	97·13	87·88	25·40	18,650	25·45	224	0·31
	Total ..	781,206	131·52	13	P. 10,064 R. 96	9.988 20	20,052 116	1,551	20,080	12,476	6,753	19,495	117	98	97·22	84·48	25·08	19,702	25·22	249	0·32
	THÁNA COLLECTORATE—																				
11	Kalyán Town	12,910	5,164·	1	P. 227 R. 17	210 5	437 22	459	437	186	233	424	22	10	97·03	45·45	33·62	507	39·27	4	0·31
12	Thána do.	14,456	2,069·76	1	P. 361 R. 75	201 12	562 87	649	562	392	20	560	87	...	99·64	...	38·74	759	52·50	6	0·42
13	In the 10 Rural Circles ... Local Fund	780,001	198·65	12	P. 8,507 R. 107	8,216 63	16,723 170	1,408	16,743	7,428	8,739	16,422	170	102	98·20	60·00	21·18	17,252	22·12	483	0·62
	Municipal ...			...	P. 243 R. 2	233 2	476 4	480	476	330	139	469	4	1	98·53	25·00	0·63				
	Total ...	807,367	205·12	14	P. 9,338 R. 201	8,860 82	18,198 283	1,320	18,218	8,336	9,131	17,875	283	113	98·23	39·93	22·28	18,518	22·94	493	0·61

Statement No. I., showing Particulars of Vaccination, &c.—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator	Primary Vaccinations.				Re-vaccinations.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE WESTERN REGISTRATION DISTRICT—*continued.*				Males.	Females.	Total.														
	KOLÁBA COLLECTORATE—																				
14	Mahád Town	6,804	15,892·55	..	.....	...	...	*Vide*	Statement No.			III.	...	...	...	...	...	...	...	5	0·73
15	Panvel do.	10,351	3,450·33	1	P. 118 R. 3	106 2	224 5	229	224	141	69	210	5	5	93·75	100·	20·77	456	44·05	9	0·87
16	Uran do.	10,149	1,793·31		P. 53 R. 6	48 3	101 9		101	72	26	101	9	9	100·	100·	10·84	190	18·72	...	...
17	Pen do.	8,082	52,247·27	1	P. 80 R. 3	56 ...	136 3	277	136	100	28	130	3	3	95·59	100·	16·46	...	...	...	...
18	Alibág do.	6,376	10,544·29		P. 19 R.	8 1	27 1		27	17	10	27	1	...	100·	...	4·23	13	2·04	7	1·10
19	In the 7 Rural Circles .. Local Fund ...	441,068	245·39	11	P. 6,185 R. 322	5,988 292	12,173 614	1,162	12,175	9,231	2,630	11,951	614	426	98·18	69·38	28·06	11,838	26·84	202	0·46
	In the 7 Rural Circles .. Municipal ...			...	P. 166 R. 4	151 1	317 5	322	330	253	39	293	5	5	92·43	100·	0·68				
	Total ...	482,830	267·76	13	P. 6,621 R. 338	6,357 299	12,978 637	1,047	12,993	9,814	2,802	12,712	637	448	97·95	70·33	27·26	12,497	25·88	223	0·46
	NATIVE STATES—																				
20	Dang Territory...	60,270	15·70	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	264	4·28	...	...
21	Jawhár	48,556	90·93	1	770	710	1,480	1,480	1,480	958	492	1,480	..	...	100·	...	30·48	1,850	38·10	...	...
22	Janjira	76,261	234·96	2	P. 1,406 R. 3	1,370 6	2,776 9	1,392	2,776	1,604	1,127	2,763	9	9	99·53	100·	36·30	2,184	28·60	...	...
	TOTALS BY ESTABLISHMENTS IN WESTERN REGISTRATION DISTRICT.																				
	Cantonment	2,969	...	...	12	25	37	37	37	23	8	31	...	...	83·79	...	10·44	23	7·75	...	...
	Municipal	104,874	4,923·30	6	P. 2,297 R. 130	2,016 27	4,313 157	745	4,326	2,913	1,127	4,244	157	44	98·40	28·03	40·89	3,987	38·02	30	0·29
	Local Fund	3,200,791	148·59	60	P. 42,967 R. 703	42,012 431	84,979 1,134	1,435	85,099	52,387	29,654	82,887	1,136	796	97·54	70·19	26·14	84,128	26·28	1,469	0·46
	Native States	185,187	39·41	3	P. 2,176 R. 3	2,080 6	4,256 9	1,422	4,256	2,562	1,619	4,243	9	9	99·69	100·	22·96	4,034	21·78	...	...
	Grand Total ...	3,493,821	132·74	69	P. 47,452 R. 836	46,133 464	93,585 1,300	1,375	93,718	57,885	32,408	91,405	1,302	849	97·67	65·31	26·40	92,172	26·38	1,499	0·43
	THE PRESIDENCY CIRCLE.																				
23	Bombay City (Municipal) ...	773,196	35,145·27	8	P. 8,373 R. 843	8,253 114	16,626 957	2,198	16,869	13,270	2,767	16,184	957	655	97·34	68·44	21·78	20,239	26·18	348	0·45

	THE CENTRAL REGISTRATION DISTRICT.																				
	AHMEDNAGAR COLLECTORATE—																				
24	Ahmednagar Town	32,903	75,693·63	1	P. 753 R. 7	691 43	1,444 50	1,494	1,444	621	737	1,392	50	33	96·40	66·00	43·31	1,100	33·43	27	0·82
25	Do. Cantonment ...	4,589			P. 55 R. 12	35 ...	90 12	102	90	49	41	90	12	7	100.	58·33	21·14	110	23·97	...	...
26	Sangamner Town, Local Fund.	8,796	14,814·32	...	P. 174 R. 1	170 ...	344 1	345	344	201	86	288	1	..	83·72	...	32·74	400	45·48	2	0·23
27	In the 11 Rural Circles. Local Fund	704,940	105·76	14	P. 15,467 R. 305	15,212 50	30,679 355	2,217	30,689	22,172	6,564	28,915	355	291	94·25	81·97	41·43	24,934	35·37	59	0·08
	Municipal ...	...	...	...	20	14	34	34	34	18	12	30	...	...	88·24	...	0·04	...	...	...	...
	Total ...	751,228	112·69	15	P. 16,469 R. 325	16,122 93	32,591 418	2,201	32,601	23,061	7,440	30,715	418	331	94·24	79·19	41·33	26,544	35·33	88	0·12
	POONA COLLECTORATE—																				
28	Poona City	99,622	19,924·40	2	P. 1581 R. 461	1,416 39	2,997 500	1,748	2,997	1,689	1,162	2,879	500	454	96·06	90·80	33·46	2,771	27·82	112	1·12
29	Poona and Kirkee Cantonments	37,381	4,255·40	1	P. 783 R. 604	654 45	1,437 649	2,086	1,437	1,092	278	1,371	649	297	95·41	45·76	44·62	1,525	40·80	13	0·35
30	Junnar Town, Local Fund ...	10,373	28,492·36	...	229	219	448	448	448	241	188	435	...	...	97·10	...	41·94	78	7·52	...	...
31	In the 8 Rural Circles, Local Fund	753,245	141·23	14	P. 12,405 R. 322	12,147 23	24,552 345	1,778	24,554	12,503	10,088	22,694	345	219	92·43	63·48	30·42	18,868	25·05	336	0·45
	Total ..	900,621	168·41	17	P. 14,998 R. 1,387	14,436 107	29,434 1,494	1,819	29,436	15,525	11,716	27,379	1,494	970	93·02	64·93	31·48	23,242	25·81	461	0·51
	SHOLÁPUR COLLECTORATE—																				
32	Sholápur Town	59,890	44,987·79	1	P. 1021 R. 188	1,029 19	2,050 207	2,257	2,050	1,357	534	1,912	207	168	93·27	81·16	34·73	2,036	34·00	30	0·50
33	Bársi do.	16,126	43,002·67	1	370	310	680	680	680	382	269	652	...	...	95·88	...	40·43	720	44·65	7	0·43
34	Pandharpur Town	16,910	33,299·69	1	P. 399 R. 14	416 1	815 15	830	815	687	102	789	15	5	96·81	33·33	46·95	1,103	65·23	...	...
35	In the 7 Rural Circles. Local Fund	489,561	108·33	9	P. 9,739 R. 137	9,474 9	19,213 146	2,151	19,224	14,712	3,564	18,352	146	92	95·52	63·01	37·67	18,648	38·09	65	0·13
	Municipal ...	...	...	...	P. 820 R. 98	844 ...	1,664 98	1,762	1,664	1,352	211	1,564	98	32	93·99	32·65	3·26				
	Total ..	582,487	128·83	12	P. 12,349 R. 437	12,073 29	24,422 466	2,074	24,433	18,490	4,680	23,269	466	297	95·28	63·73	40·46	22,507	38·64	102	0·18
	SÁTÁRA COLLECTORATE—																				
36	Karád Town	10,778	29,352·85	...	.....	...	...	*Vide* Statement		No. III.	...	...	...	...	...	...	...	10	1 76	5	0·46
37	Wái do.	11,676	5,838·	...	.....	...	...	...	Ditto	...	...	...	...	...	...	...	...	...	..	6	0·51
38	Sátára do.	29,028	35,319·24	1	P. 443 R. 106	382 12	825 118	943	825	544	279	823	118	118	99·26	100·	32·42	1,017	35·04	12	0·41
39	In the 12 Rural Circles, Local Fund	1,010,868	202 80	18	P. 20,590 R. 164	19,916 16.	40,506 180	2,260	40,528	30,285	7,976	38,322	180	107	94·61	59·44	38·02	33,397	33·04	307	0·30
	Total .	1,062,350	212·98	19	P. 21,033 R. 270	20,298 28	41,331 298	2,191	41,353	30,829	8,255	39,145	298	225	94·71	75·50	37·06	34,433	32·41	330	0·31

Statement No. I., showing Particulars of Vaccination, &c.—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinations.				Re-vaccinations.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE CENTRAL REGISTRATION DISTRICT—*continued.*				Males.	Females.	Total.														
	RATNÁGIRI COLLECTORATE—																				
40	Vengurla Town...	8,947	336,828·24	1	P. 200 R. 2	185 ..	385 2	387	385	222	140	362	2	2	94·03	100·	40·68	51	5·70	28	3·13
41	Ratnágiri do. Local Fund ...	12,616	322,960·60	...	P. 171 R. 11	193 ...	364 11	375	371	227	116	345	11	8	94·78	72·73	27·98	299	23·70	17	1·35
42	In the 8 Rural Circles, Local Fund	975,527	248·73	13	P. 14,291 R. 210	13,821 79	28,112 289	2,185	28,171	15,338	11,613	27,463	289	171	97·69	59·17	28·33	25,659	26·30	426	0·44
	Total ...	997,090	254·22	14	P. 14,662 R. 223	14,199 79	28,861 302	2,083	28,927	15,787	11,869	28,170	302	181	97·61	59·93	28·43	26,009	26·08	471	0·47
	NATIVE STATES—																				
43	Akalkot	58,040	116·54	1	P. 980 R. 3	954 6	1,934 9	1,943	1,940	1,517	268	1,800	9	9	93·07	100·	31·17	1,987	34·23	...	...
44	Modnimb	13,773	154·75	...	P. 242 R. 8	247 ...	489 8	497	489	375	97	472	8	7	96·52	87·50	34·78	425	30·86	...	...
	SÁTÁRA JÁGHI'RS—																				
45	Pant Pratinidhi	58,916	131·80	1	P. 375 R. ...	299 1	674 1	675	690	187	401	600	1	...	89·02	...	10·18	1,055	17·91	...	...
46	Pant Sachiv	145,876	97·84	3	P. 2,487 R. 1	2,516 ...	5,003 1	1,668	5,005	2,150	2,669	4,973	1	1	99·40	100·	34·10	2,845	19·50	...	...
47	Phaltan	58,402	147·11	1	P. 1,066 R. 1	1,086 ...	2,152 1	2,153	2,152	1,128	749	1,881	1	1	87·41	100·	32·22	1,444	24·73	...	...
48	Jath	55,493	56·68	1	P. 1,120 R. 7	1,161 ..	2,281 7	2,288	2,287	644	1,450	2,114	7	5	92·68	71·43	38·18	1,641	29·57	...	...
	Total ...	318,687	96·16	6	P. 5,048 R. 9	5,062 1	10,110 10	1,687	10,134	4,109	5,269	9,568	10	7	94·64	70·00	30·05	6,985	21·92	...	...
49	Sávantvádi	174,433	193·81	3	P. 2,835 R. 290	2,723 331	5,558 621	2,060	5,604	4,349	955	5,333	621	366	95·95	58·94	32·67	5,712	32·75	...	...
	TOTALS BY ESTABLISHMENTS IN CENTRAL REGISTRATION DISTRICT.																				
	Cantonment	37,381	4,255·40	1	P. 783 R. 604	654 45	1,437 649	2,086	1,437	1,092	278	1,371	649	297	95·41	45·76	44·62	1,514	40·50	13	0·35
	Municipal	268,015	31,318·17	8	P. 5,662 R. 888	5,322 114	10,984 1,002	1,498	10,984	6,921	3,487	10,493	1,002	819	95·53	81·74	42·21	10,911	40·71	188	0·70
	Local Fund	3,988,380	156·85	68	P. 73,066 R. 1,150	71,152 177	144,218 1,327	2,140	144,329	95,679	40,195	136,814	1,327	888	94·87	66·92	34·53	120,310	31·65	1,250	0·31
	Native State	564,933	117·52	10	P. 9,105 R. 310	8,986 338	18,091 648	1,874	18,167	10,350	6,589	17,173	648	389	94·93	60·03	31·09	15,109	26·74	...	...
	Grand Total ...	4,858,709	160·61	87	P. 88,616 R. 2,952	86,114 674	174,730 3,626	2,050	174,917	114,042	50,549	165,851	3,626	2,393	94·92	65·99	34·63	147,844	30·43	1,451	0·30

	THE SOUTHERN REGISTRATION DISTRICT.																					
	BELGAUM COLLECTORATE—																					
50	Gokák Town	10,307	26385·92	...	.....	...	...	Vide Statement No.	III.	...	...	...	...	...	...	...	...	...	4	0·39
51	Athni do.	11,186	12195·98	1	P. 261 R. 6	285 ...	546 6	552	546	412	113	528	6	4	96·70	66·67	47·56	85	7·60	4	0·36
52	Belgaum do.	23,115	34188·93	1	P. 594 R. 21	560 ...	1,154 21	1,286	1,154	706	378	1,086	21	3	94·11	14·29	47·11	870	37·64	43	1·86
53	Do. Cantonment	9,582	...	...	P. 63 R. 1	47 ...	110 1		110	84	16	100	1	...	90·91	...	10·44	252	26·30	3	0·31
54	In the 7 Rural Circles, Local Fund.	809,824	173·97	15	P. 11,759 R. 653	11,740 117	23,499 770	1,618	23,521	14,611	8,067	22,757	770	505	96·84	65·58	28·72	23,582	29·12	570	0·70
	Total ...	864,014	185·54	17	P. 12,677 R. 681	12,632 117	25,309 798	1,536	25,331	15,813	8,574	24,471	798	512	96·69	64·16	28·92	24,789	28·69	624	0·72
	DHÁRWÁR COLLECTORATE—																					
55	Dhárwár Town	27,191	23676·52	1	P. 447 R. 7	461 4	908 11	919	922	619	248	872	11	8	96·04	72·73	32·36	1,274	46·85	19	0·70
56	Hubli do.	36,677	31090·44	1	P. 511 R. 6	567 ...	1,078 6	1,084	1,081	824	221	1,049	6	5	97·31	83·33	28·74	1,462	39·86	23	0·63
57	Gadag-Bettigeri Town... ...	17,001	61127·19	1	P. 492 R. 14	483 ...	975 14	989	975	759	160	923	14	7	94·67	50·00	54·70	1,275	75·00	11	0·65
58	Ránebennur do. Local Fund.	10,202	27666·44	1	P. 271 R. 1	283 1	554 2	556	554	280	251	537	2	1	96·93	50·00	52·73	1,100	107·82	6	0·59
59	In the 14 Rural Circles, do. ...	791,836	174·73	16	P. 12,221 R. 912	12,076 111	24,297 1,023	1,582	24,343	15,034	7,669	22,967	1,023	493	94·53	48·19	29·63	21,328	26·93	642	0·81
	Total ...	882,907	194·70	20	P. 13,942 R. 940	13,870 116	27,812 1,056	1,443	27,875	17,516	8,549	26,348	1,056	514	94·74	48·67	30·42	26,439	29·95	701	0·79
	BIJÁPUR COLLECTORATE—																					
60	Bijápur Town...	11,424	5372·05	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
61	Bágalkot do.	12,850	42174·36	1	P. 518 R. 90	535 6	1,053 96	1,149	1,053	661	295	956	96	43	90·79	44·79	77·74	1,002	77·98	...	...
62	Kaládgi do. Local Fund ...	7,024	59938·13	...	.....	...	...	...	...	...	...	...	...	...	..	...	...	107	15·23	7	1·00
63	In the 8 Rural Circles, do. ...	607,195	105·51	11	P. 10,378 R. 1,068	10,104 630	20,482 1,698	2,016	20,492	11,975	7,565	19,780	1,698	1,320	96·57	77·74	34·75	17,170	28·28	495	0·79
	Total ...	638,493	110·90	12	P. 10,896 R. 1,158	10,639 636	21,535 1,794	1,944	21,545	12,636	7,860	20,736	1,794	1,363	96·29	75·98	34·61	18,279	28·63	502	0·78
	KÁNARA COLLECTORATE—																					
64	Kárwár Town	13,761	1169·44	1	P. 273 R. 91	260 6	533 97	630	538	139	219	395	97	77	74·11	79·38	34·30	455	33·06	3	0·22
65	Kumta do. Local Fund ...	10,629	1445·82	...	P. 141 R. 1	162 1	303 2	305	303	165	100	268	2	...	88·45	...	25·21	230	21·64	31	2·92
66	In the 11 Rural Circles, Local Fund.	397,450	102·13	13	P. 4,715 R. 421	4,389 254	9,104 675	752	9,167	2,151	4,444	8,010	675	410	87·98	60·74	21·19	9,815	24·69	325	0·82
	Total ...	421,840	107·87	14	P. 5,129 R. 513	4,811 261	9,940 774	765	10,008	2,455	4,763	8,673	774	487	87·25	62·92	21·71	10,500	24·89	359	0·85

Statement No. I., showing Particulars of Vaccination, &c.—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated. Males.	Females.	Total.	Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinations. Total.	Successful. Under 1 year.	Over 1 and under 6 years.	Total of all Ages.	Re-vaccinations. Total.	Successful.	Percentage of Successful Cases. Primary.	Re-vaccination.	Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years. Number.	Ratio per 1,000.	Average Annual Number of Deaths from Small-pox during previous five years. Number	Ratio per 1,000.
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE SOUTHERN REGISTRATION DISTRICT—*continued.*																				
	SOUTHERN MARA'THA JA'GHIRS—																				
67	Sángli	196,832	219·68	6	P. 2,269 R. 56	2,310 41	4,579 97	779	4,583	2,334	1,802	4,155	97	75	90·74	77·32	21·49	3,907	19·85	...	...
68	Jamkhandi	83,917	170·56	2	P. 1,493 R. 49	1,419 3	2,912 52	1,482	2,912	1,959	881	2,863	52	45	98·32	86·54	34·65	3,534	42·11	...	...
69	Miraj (Senior)	55,959	222·94	2	P. 982 R. 27	936 9	1,918 36	977	1,936	1,253	537	1,792	36	28	93·43	77·78	32·52	1,811	32·36	...	...
70	Do. (Junior)	30,541	146·83	1	261	230	491	491	491	268	219	487	...	...	99·19	...	15·95	559	18·30	...	...
71	Kurundvád (Elder)	35,187	193·33	1	P. 662 R. 192	606 90	1,268 282	1,550	1,268	584	618	1,209	282	176	95·35	62·41	39·36	826	23·47	...	...
72	Do. (Younger)... ...	25,811	226·41	1	P. 404 R. 2	417 ...	821 2	823	821	389	351	740	2	...	90·13	...	28·67	787	30·49	...	...
73	Mudhol	52,163	144·10	1	P. 896 R. 74	883 6	1,779 80	1,859	1,779	1,257	491	1,758	80	56	98·82	70·00	34·78	1,851	35·48	...	...
74	Bámdurg...	29,570	211·21	1	P. 571 R. 59	527 1	1,098 60	1,158	1,102	598	433	1,034	60	15	94·17	25·00	35·43	940	31·79	...	...
	Total ...	509,980	192·81	15	P. 7,538 R. 459	7,328 150	14,866 609	1,032	14,892	8,642	5,332	14,038	609	395	94·43	64·86	28·30	14,215	27·87	...	...
	UNDER THE DHÁRWÁR AGENCY—																				
75	Sávanur State	14,763	210·90	1	P. 386 P. 6	365 1	751 7	758	751	417	290	709	7	3	94·41	42·86	48·23	1,150	77·90	...	...
76	KOLHÁPUR STATES	800,189	284·16	13	P. 13,176 R. 1,368	13,094 150	26,270 1,518	2,138	26,308	15,860	9,260	25,260	1,518	1,075	96·16	70·82	32·91	22,166	27·70	...	...
	TOTALS BY ESTABLISHMENTS IN SOUTHERN REGISTRATION DISTRICT.																				
	Municipal	151,363	9,432·55	7	P. 3,159 R. 236	3,198 16	6,357 252	944	6,379	4,204	1,650	5,909	252	147	92·95	58·33	40·01	6,752	44·61	102	0·67
	Local Fund	2,655,891	140·95	56	P. 39,485 R. 3,056	38,754 1,114	78,239 4,170	1,472	78,380	44,216	28,096	74,319	4,170	2,720	94·99	65·44	29·01	73,255	27·58	2,084	0·71
	Native State	1,324,932	239·55	29	P. 21,100 R. 1,833	20,787 301	41,887 2,134	1,518	41,951	24,9[illegible]	14,882	40,007	2,134	1,473	95·51	69·03	31·31	37,531	28·33	...	...
	Grand Total ..	4,132,186	169·42	92	P. 63,744 R. 5,125	62,739 1,431	126,483 6,556	1,446	126,710	73,339	44,628	120,235	6,556	4,349	95·06	66·34	30·15	117,538	28·44	2,186	0·53
	THE EASTERN GUJARAT REGISTRATION DISTRICT.																				
	SURAT COLLECTORATE—																				
77	Bulsár Town	13,229	5,291·60	...	.....	...	...	*Vide*	Statement	No.	III.	...	...	...	...	...	...	...	...	2	0·15
78	Surat do.	109,844	36,614·66	2	P. 1,409 R. 28	1,377 1	2,786 29	1,407	2,786	2,320	410	2,736	29	20	98·21	68·96	25·09	2,948	26·84	176	1·60
79	In the 8 Rural Circles, Local Fund	491,125	296·39	9	P. 8,768 R. 225	8,451 114	17,219 339	1,951	17,268	10,965	5,381	16,664	339	221	96·78	65·19	34·38	14,042	28·59	121	0·25
	Total ...	614,198	369·44	11	P. 10,177 R. 253	9,828 115	20,005 368	1,852	20,054	13,285	6,791	19,400	368	241	96·98	65·49	31·98	16,990	27·66	299	0·49

	BROACH COLLECTORATE—																				
80	Broach City	37,281	22133·43	1	P. 593 R. 33	570 2	1,163 35	1,198	1,167	859	258	1,120	35	7	96·30	20·00	30·23	1,089	29·21	21	0·56
81	Jambusar Town, Local Fund...	11,479	21110·80	...	P. 203 R. 2	213 1	416 3	419	416	279	115	402	3	1	96·63	33·33	35·11	218	18·99	...	...
82	In the 6 Rural Circles, Local Fund	278,170	191·73	5	P. 4,477 R. 141	4,260 34	8,737 175	1,782	8,335	6,224	2,170	8,445	175	114	96·66	65·14	30·77	8,849	31·81	10	0·04
	Total ...	326,930	224·99	6	P. 5,273 R. 176	5,043 37	10,316 213	1,755	10,418	7,362	2,543	9,967	213	122	96·62	57·28	30·86	10,156	31·06	31	0·09
	KAIRA COLLECTORATE—																				
83	Kapadvanj Town	14,442	63307·40	...	...	...	...	*Vide*	Statement	No.	III.	...	...	...	...	...	...	...	...	9	0·62
84	Nadiád do.	28,304	85044·88	1	P. 535 R. 24	478 3	1,013 27	1,040	1,013	776	181	958	27	3	94·57	11·11	33·95	960	33·92	1	0·04
85	Borsad Town, Local Fund ...	12,228	64146·89	...	P. 274 R. 6	227 ...	501 6	507	501	421	70	493	6	5	98·40	83·33	40·23	...	...	2	0·16
86	Kaira do. do. ...	12,640	44942·22	...	P. 152 R. 1	123 1	275 2	277	275	205	59	265	2	2	96·36	100·	21·12	326	25·79	2	0·16
87	In the 7 Rural Circles, Local Fund	737,186	458·57	10	P. 13,177 R. 73	11,054 4	24,231 77	2,431	24,288	18,896	4,861	23,826	77	56	98·33	72·73	32·40	20,859	28·30	44	0·06
	Total .	804,800	500·31	11	P. 14,138 R. 104	11,882 8	26,020 112	2,376	26,077	20,298	5,171	25,542	112	66	98·16	58·93	31·82	22,145	27·52	58	0·07
	PANCH MAHÁLS—																				
88	Godhra Town, Local Fund ...	13,342	79802·62	...	P. 214 R. 266	229 20	443 286	729	443	341	98	442	286	203	99·77	70·98	48·34	251	18·81	6	0·45
89	Dohad do. do. ...	12,394	74132·64	...	P. 212 R. 25	207 ...	419 25	444	419	272	135	414	25	15	98·81	60·00	34·61	403	32·52	3	0·24
90	In the 5 Rural Circles, Local Fund	229,743	142·43	6	P. 4,693 R. 79	4,473 42	9,166 121	1,548	9,207	5,854	2,732	8,833	121	76	96·37	62·81	38·78	8,129	35·38	17	0·07
	Total ...	255,479	158·35	6	P. 5,119 R. 370	4,909 62	10,028 432	1,743	10,069	6,467	2,965	9,680	432	294	96·62	68·06	39·08	8,783	34·38	26	0·10
	AHMEDABAD COLLECTORATE—																				
91	Dholka Town	17,716	23621·33	1	P. 406 R. 46	385 7	791 53	844	801	714	54	773	53	40	97·72	75·47	45·89	596	33·64	...	...
92	Ahmedabad City	124,767	57722·57	2	P. 2,163 R. 25	2,076 4	4,239 29	2,134	4,256	3,599	556	4,162	29	21	98·18	72·41	33·53	4,147	33·24	1	0·01
93	Ahmedabad Cantonment ...	2,854	...	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	56	19·62	...	...
94	Gogha Town, Local Fund ...	7,063	9417·33	...	P. 140 R. 5	126 2	266 7	273	266	181	64	246	8	2	92·48	28·57	35·11	261	36·95	3	0·42
95	Viramgám Town, do. ...	18,990	30925·19	...	P. 303 R. 3	290 ...	593 3	596	593	477	97	574	3	2	96·80	66·67	30·33	542	28·54	4	0·21
96	In the 7 Rural Circles Local Fund	684,934	179·45	12	P. 12,593 R. 147	11,741 23	24,334 170	2,042	24,380	20,166	3,621	23,828	170	110	97·92	64·71	34·95	21,238	31·01	66	0·10
	Total ...	856,324	224·10	15	P. 15,605 R. 226	14,618 36	30,223 262	2,032	30,296	25,137	4,392	29,583	263	175	97·88	66·79	34·75	26,840	31·34	74	0·09
97	Rewa Kántha States	543,452	113·41	13	P. 9,311 R. 119	8,832 34	18,143 153	1,407	18,203	7,145	9,801	17,795	153	107	98·08	69·93	32·94	16,892	31·08	...	...
98	Mahi Kántha States	517,485	46·84	8	P. 7,985 R. 39	7,473 6	15,458 45	1,938	15,596	9,673	5,492	15,257	45	41	98·70	91·11	29·56	11,235	21·71	...	...
99	Cambay	86,074	245·93	1	P. 1,421 R. 5	1,291 2	2,712 7	2,719	2,718	1,452	1,130	2,601	7	4	95·91	57·14	30·27	1,519	17·65	...	...
100	Surat Agency . Dharampor.	101,289	127·57	2	P. 2,158 R. 1	2,074 ...	4,232 1	2,116	4,234	948	2,590	3,993	1	1	94·35	100·	39·43	2,927	28·90	...	...
101	Surat Agency . Bánsda ...	34,122	88·86	1	P. 810 R. 11	748 4	1,558 15	1,573	1,559	866	616	1,547	15	13	99·29	86·67	45·72	1,195	35·02	...	...
102	Surat Agency . Sachin Local Fund ...	15,721	374·31	...	P. 192 R. 2	164 ...	356 2	358	356	236	90	327	2	1	91·85	50·00	20·86	489	31·10	...	...
103	Jámbughoda Local Fund ...	6,440	45·03	...	P. 31 R. ...	23 1	54 1	55	55	29	19	48	1	...	88·89	...	7·45	174	27·02	...	...

Statement No. I., showing Particulars of Vaccination, &c.—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinations.				Re-vaccinations.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
					Males.	Females.	Total.														
	TOTALS BY ESTABLISHMENTS IN EASTERN GUJARÁT REGISTRATION DISTRICT.																				
	Municipal	320,766	40205·69	7	P. 5,106 R. 156	4,886 17	9,992 173	1,452	10,023	8,268	1,459	9,749	173	91	97·57	52·60	30·68	9,951	31·02	198	0·62
	Local Fund	2,559,126	247·60	42	P. 45,429 R. 975	41,581 242	87,010 1,217	2,101	87,302	64,546	19,512	84,807	1,218	808	97·47	66·39	33·45	75,626	29·55	290	0·11
	Native State	1,282,422	73·84	25	P. 21,685 R. 175	20,418 46	42,103 221	1,693	42,220	20,084	19,629	41,103	221	166	97·84	75·11	32·25	33,768	26·33	...	...
	Grand Total ...	4,162,314	150·20	74	P. 72,220 R. 1,306	66,885 305	139,105 1,611	1,902	139,545	92,898	40,600	135,749	1,612	1,065	97·59	66·11	32·87	119,345	28·67	488	0·12
	THE WESTERN GUJARÁT CIRCLE—KA'THIA'WA'R STATES.																				
104	Jhálávád Pránt. — Limbdi	43,063	153·86	1	P. 1,277 R. 206	1,203 172	2,480 378	2,858	2,480	1,718	512	2,238	378	270	90·24	71·43	58·24	2,139	49·67	...	...
105	Jhálávád Pránt. — Dhrángadra	99,686	87·29	1	P. 1,246 R. 31	1,223 27	2,469 58	2,527	2,469	1,643	731	2,391	58	51	96·84	87·93	24·50	2,431	24·39	...	...
106	Jhálávád Pránt. — In 4 other States ...	296,880	103·44	4	P. 4,859 R. 1,306	4,807 953	9,666 2,259	2,981	9,670	6,140	2,736	8,913	2,259	1,325	92·21	58·65	34·49	10,289	34·66	...	...
	Total ...	439,629	102·43	6	P. 7,382 R. 1,543	7,233 1,152	14,615 2,695	2,885	14,619	9,501	3,979	13,542	2,695	1,646	92·66	61·08	34·55	14,859	33·80	...	...
107	Hálár Pránt. — Rájkot	61,809	229·77	1	P. 1,057 R. 422	897 74	1,954 496	2,536	1,961	1,385	484	1,880	496	455	96·21	91·73	37·78	2,770	44·82	...	...
108	Hálár Pránt. — Do. Cantonment...	6,013	2696·41			44	86		86	53	31	85	...	...	98·84	...	14·14	194	32·26	...	...
109	Hálár Pránt. — Gondal	135,604	197·41	2	P. 2,842 R. 361	2,953 276	5,795 637	3,216	5,805	3,076	2,102	5,201	637	388	89·75	60·91	41·22	4,302	31·73	...	...
110	Hálár Pránt. — Morvi	89,964	121·57	1	P. 1,345 R. 195	1,321 168	2,666 363	3,029	2,678	1,895	532	2,433	363	247	91·26	68·04	29·79	2,857	31·76	...	...
111	Hálár Pránt. — Navánagar	316,147	93·16	3	P. 4,293 R. 777	4,035 578	8,328 355	3,228	8,331	4,204	2,780	7,004	1,355	783	84·10	57·79	24·63	7,240	22·90	...	...
112	Hálár Pránt. — In 3 other States ...	74,790	207·13	3	P. 4,385 R. 338	4,073 207	8,458 545	3,001	8,472	5,437	2,364	7,844	545	356	92·74	65·32	109·64	7,087	94·76	...	...
	Total ...	684,327	116·93	10	P. 13,964 R. 2,093	13,323 1,303	27,287 3,396	3,068	27,333	16,050	8,293	24,447	3,396	2,229	89·59	65·64	38·98	24,450	35·73	...	...

113	Soráth Pránt.	Junágad	387,499	101·97	4	P. 4,370 R. 206	4,417 212	8,787 418	2,301	8,809	3,975	3,672	7,752	418	241	88·22	57·66	20·63	7,395	19·08	...	...
114		Jetpur	92,553	165·27	1	P. 1,239 R. 65	1,208 46	2,447 111	2,558	2,451	1,169	898	2,081	111	79	85·04	77·17	23·34	1,961	21·19	...	...
115		Porbandar	71,072	125·42	1	P. 1,061 R. 384	1,003 352	2,064 736	2,800	2,064	911	737	1,660	736	232	80·43	31·52	26·62	1,885	26·52	..	...
116		Bántva	38,517	189·46	1	P. 1,301 R. 500	1,206 355	2,507 855	3,362	2,507	1,039	1,360	2,422	855	740	96·61	86·55	82·09	2,819	73·19	...	...
117		In 4 other States ...	50,139	196·74	4	P. 4,083 R. 661	3,977 443	8,060 1,104	2,291	8,062	4,329	3,197	7,569	1,104	826	93·91	74·82	167·43	9,178	183·05	...	...
		Total	639,780	118·81	11	P. 12,054 R. 1,816	11,811 1,408	23,865 3,224	2,463	23,893	11,423	9,864	21,484	3,224	2,118	90·02	65·69	36·89	23,238	36·32	...	...
118	Gohelvád Pránt.	Bhávnagar	420,708	147·10	6	P. 7,411 R. 350	7,140 265	14,551 615	2,528	14,617	8,056	4,995	13,178	615	328	90·56	53·33	32·10	13,387	31·82	...	...
119		Palitána	62,122	203·68	1	P. 755 R. 84	819 90	1,574 174	1,748	1,576	863	462	1,327	174	104	84·31	59·77	23·04	1,825	29·38	...	...
120		Vala	68,296	151·10	1	P. 979 R. 82	933 83	1,912 165	2,077	1,912	1,235	393	1,628	165	48	85·15	29·09	24·54	1,670	24·45	...	...
121		Jasdan	29,037	263·97	1	P. 1,231 R. 164	1,151 127	2,382 291	2,673	2,390	818	1,207	2,040	291	146	85·64	50·17	75·28	1,756	60·47	...	...
		Total ...	580,163	155·66	9	P. 10,376 R. 680	10,043 565	20,419 1,245	2,407	20,495	10,972	7,057	18,173	1,245	626	89·00	50·28	32·40	18,638	32·13	...	...
	Káthiáwár States, Total ...		2,343,899	147·69	36	P. 43,776 R. 6,132	42,410 4,428	86,186 10,560	2,687	86,340	47,946	29,193	77,646	10,560	6,619	90·09	62·68	35·95	81,185	34·64	...	...
	PÁLANPUR STATES—																					
122		Deesa	49,821	57·66	1	P. 1,123 R. 158	990 150	2,113 308	2,428	2,117	1,500	437	1,941	...	...	91·86	...	38·96	2,111	42·37	...	...
123		Do. Cantonment	8,376	33295·90		R. 5	2	7		310	171	105	277	7	7	89·94	100·	33·91	306	36·53	...	...
124		Pálanpur	184,581	80·75	2	P. 3,031 R. 37	2,836 37	5,867 74	2,970	5,878	3,627	1,956	5,597	74	36	95·40	48·65	30·52	5,164	27·98	...	...
125		Rádhanpur	98,129	85·33	1	P. 1,315 R. 56	1,297 66	2,612 122	2,734	2,616	1,789	728	2,572	122	104	98·47	85·25	27·27	2,008	20·46	...	...
126		In 3 other States	235,571	63·67	3	P. 4,272 R. 205	4,311 420	8,583 625	3,069	8,583	6,021	2,274	8,318	625	507	96·91	81·12	37·46	8,081	34·30	...	...
		Total ...	576,478	72·0[illegible]	7	P. 9,899 R. 303	9,584 525	19,483 828	2,902	19,504	13,108	5,500	18,705	828	654	96·01	78·99	33·58	17,670	30·65	...	...
	TOTALS BY ESTABLISHMENTS IN WESTERN GUJARAT CIRCLE.																					
		Government	126,019	110·98	2	P. 2,380 R. 427	2,081 76	4,461 503	2,482	4,474	3,109	1,057	4,183	503	462	93·77	91·84	36·86	5,380	42·69	...	...
		Native State	2,794,358	106·98	41	P. 51,295 R. 6,008	49,913 4,877	1,01,208 10,885	2,734	1,01,370	57,945	33,636	92,168	10,885	6,811	91·07	62·57	35·42	93,475	33·45	...	...
		Grand Total ...	2,920,377	107·14	43	P. 53,675 R. 6,435	51,994 4,953	1,05,669 11,388	2,722	1,05,844	61,054	34,693	96,351	11,388	7,273	91·18	63·87	35·48	98,855	33·85	...	...
	THE SIND REGISTRATION DISTRICT.																					
	KARÁCHI COLLECTORATE—																					
127		Karáchi Town	68,332	3,416·60	2	P. 1,774 R. 515	1,731 28	3,505 543	2,024	3,551	3,015	333	3,469	543	279	98·97	51·38	54·85	4,825	70·61	23	0·34
128		In the 13 Rural Circles, Local Fund	410,356	29·11	10	P. 7,117 R. 756	6,243 1,196	13,360 1,952	1,531	13,366	3,826	3,754	12,805	1,952	1,480	95·85	75·82	34·81	13,880	33·82	153	0·37
		Total ...	478,688	33·91	12	P. 8,891 R. 1,271	7,974 1,224	16,865 2,495	1,613	16,917	11,841	4,087	16,274	2,495	1,759	96·50	70·50	37·67	18,705	39·08	176	0·37

Statement No. I., showing Particulars of Vaccination, &c.—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinations.				Re-vaccinations.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE SIND REGISTRATION DISTRICT—*continued.*				Males.	Females.	Total.														
	HYDERABAD COLLECTORATE—																				
129	Hyderabad Town	45,195	...	1	P. 803 R. 316	686 ...	1,489 316	1,805	1,489	997	471	1,481	316	315	99·46	99·68	39·74	1,815	40·16	45	1·00
130	In the 13 Rural Circles, Local Fund	709,429	78·57	13	P. 12,297 R. 1,353	10,008 420	22,305 1,773	1,852	22,344	16,200	4,983	21,310	1,773	1,093	95·54	61·65	31·58	21,854	30·81	258	0·36
	Total ...	754,624	83·57	14	P. 13,100 R. 1,669	10,694 420	23,794 2,089	1,849	23,833	17,197	5,454	22,791	2,089	1,408	95·78	67·40	32·07	23,669	31·37	303	0·40
	THAR AND PÁRKAR—																				
131	Umarkot Town, Local Fund ...	2,828	...	...	P. 106 R. 1	87 3	193 4	197	193	165	27	192	4	3	99·48	75·00	68·95	...	...	...	...
132	In the 7 Rural Circles, do. ...	200,516	15·75	7	P. 5,218 R. 469	4,415 1,604	9,633 2,073	1,672	9,642	5,929	3,361	9,423	2,073	1,395	97·82	67·29	53·95	12,934	64·50	15	0·07
	Total ...	203,344	15·97	7	P. 5,324 R. 470	4,502 1,607	9,826 2,077	1,700	9,835	6,094	3,388	9,615	2,077	1,398	97·85	67·31	54·16	12,934	63·61	15	0·07
	SHIKÁRPUR COLLECTORATE—																				
133	Shikárpur Town	42,496	4,473·26	1	P. 656 R. 770	667 1	1,323 771	2,094	1,327	1,055	112	1,168	771	406	88·28	52·66	37·04	1,741	40·97	14	0·33
134	Sukkur do.	27,389	9,129·66	2	P. 753 R. 277	686 1,367	1,439 644	1,041	1,439	1,156	217	1,385	644	428	96·25	66·46	66·19	2,520	92·01	4	0·15
135	Lárkbána do.	13,188	2,198·	1	P. 299 R. 50	198 1	497 51	548	497	453	27	482	51	44	96·98	86·27	39·88	434	32·91	...	...
136	Rohri do.	10,224	58,422·86	1	P. 141 R. 37	107 36	248 73	321	250	177	15	192	73	19	77·42	26·03	20·64	...	...	...	...
137	In the 15 Rural Circles, Local Fund	739,689	75·48	16	P. 13,373 R. 1,941	12,106 4,927	25,479 6,876	2,022	25,562	20,473	3,483	24,175	6,884	4,142	94·88	60·24	38·28	28,433	37·83	51	0·07
	Total ...	832,986	84·92	21	P. 15,222 R. 3,083	13,764 5,332	28,986 8,415	1,781	29,075	23,314	3,854	27,402	8,423	5,039	94·54	59·88	38·95	33,128	39·69	69	0·08
	UPPER SIND FRONTIER—																				
138	Jacobabad Town and Cantonment, Local Fund	11,352	...	...	P. 78 R. 34	77 1	155 35	190	155	114	28	144	35	24	92·90	68·57	14·80	...	...	1	0·09
139	In the 4 Rural Circles, Local Fund	132,829	56·09	4	P. 2,814 R. 734	2,579 1,572	5,393 2,306	1,925	5,405	3,690	1,231	4,981	2,308	1,486	92·36	64·44	48·69	6,392	48·72	12	0·09
	Total ...	144,181	61·86	4	P. 2,892 R. 768	2,656 1,573	5,548 2,341	1,972	5,560	3,804	1,259	5,125	2,343	1,510	92·38	64·50	46·02	6,392	44·84	13	0·09
	NATIVE STATE—																				
140	Khairpur State...	129,153	21·14	3	P. 2,290 R. 73	1,723 11	4,013 84	1,366	4,013	2,611	1,005	3,939	84	53	98·16	3·10	30·91	3,329	25·78	...	...

	TOTALS BY ESTABLISHMENTS IN SIND REGISTRATION DISTRICT.																				
	Municipal	206,824	5,347·74	8	P. 4,426 R. 1,965	4,075 433	8,501 2,398	1,362	8,553	6,853	1,175	8,177	2,398	1,491	96·19	62·18	46·75	11,334	57·65	86	0·44
	Local Fund	2,206,999	46·00	50	P. 41,003 R. 5,296	35,515 9,723	76,518 15,019	1,831	76,667	55,397	16,867	73,030	15,029	9,623	95·44	64·07	37·45	83,493	37·66	490	0·22
	Native State	129,153	21·14	3	P. 2,290 R. 73	1,723 11	4,013 84	1,366	4,013	2,611	1,005	3,939	84	53	98·16	63·10	30·91	3,329	25·78	...	...
	Grand Total ...	2,542,976	46·99	61	P. 47,719 R. 7,334	41,313 10,167	89,032 17,501	1,746	89,233	64,861	19,047	85,146	17,511	11,167	95·64	63·81	37·87	98,156	38·60	576	0·23
	THE BARODA CIRCLE.																				
141	Baroda States	2,185,005	254·96	31	P. 35,817 R. 1,132	32,222 306	68,039 1,438	2,241	68,174	56,876	8,315	65,506	1,441	1,171	96·28	81·43	30·52	63,172	28·91	...	...
	THE CUTCH CIRCLE.																				
142	Cutch States...	512,084	78·78	17	P. 10,632 R. 270	10,230 311	20,862 581	1,261	20,908	14,638	5,786	20,669	581	505	99·07	86·92	41·35	19,940	38·94	...	...
	ADEN.																				
143	Aden Municipality	34,860	3,005·17	1	P. 543 R. 4	207 4	750 8	758	750	106	343	728	8	8	97·07	100·	21·11	536	15·38	...	...
144	Khelat	...	...	...	P. 53 R. 5	52 1	105 6	111	105	27	61	105	6	6	100·	100·	...	174	...	...	...
	TOTAL OF THE BOMBAY PRESIDENCY. BY ESTABLISHMENTS.																				
	Government	126,019	110·98	2	P. 2,380 R. 427	2,081 76	4,461 503	2,482	4,474	3,109	1,057	4,183	503	462	93·77	91·84	36·86	5,360	42·69	...	...
	Municipal...	1,859,898	14,743·27	45	P. 29,566 R. 4,222	27,957 725	57,523 4,947	1,388	57,884	42,535	12,008	55,484	4,947	3,255	96·46	65·80	31·58	63,710	34·25	952	0·51
	Cantonment	40,350	4,593·38	1	P. 795 R. 604	679 45	1,474 649	2,123	1,474	1,115	286	1,402	649	297	95·12	45·76	42·11	1,537	38·09	13	0·32
	Local Fund	14,611,187	117·64	276	P. 241,950 R. 11,180	229,014 11,687	470,964 22,867	1,789	471,777	312,225	134,324	451,857	22,880	14,844	95·94	64·91	31·94	436,812	29·90	5,583	0·38
	Native State	8,973,074	112·64	159	P. 154,153 R. 9,809	146,411 6,197	300,564 16,006	1,991	301,164	190,012	91,522	285,003	16,009	10,583	94·82	66·12	32·92	270,532	30·13	...	...
	In British Territory ...	16,503,663	132·95	323	P. 272,288 R. 16,009	257,657 12,458	529,945 28,467	1,723	531,120	355,834	146,645	508,730	28,480	18,402	96·00	64·64	31·94	501,632	30·40	6,548	0·40
	In Native State Territory	9,111,865	112·46	160	P. 156,556 R. 10,233	148,485 6,272	305,041 16,505	2,022	305,653	193,162	92,552	289,199	16,508	11,039	94·81	66·88	32·95	276,339	30·33	...	...
	GRAND TOTAL ...	25,615,528	124·86	483	P. 428,844 R. 26,242	406,142 18,730	834,986 44,972	1,822	836,773	548,996	239,197	797,929	44,988	29,441	95·56	65·47	32·30	777,971	30·37	6,548	0·26

STATEMENT No. II., showing the Cost of the Department

No.	Circles and Districts.	Establishment.																		
		Deputy Sanitary Commissioners.	Superintendents of Vaccination.	Inspectors of Sanitation and Vaccination.			Assistant Superintendents of Vaccination.			Clerks and Kárkúns.	Vaccinators.									Hávaldars and Peons.
				1st Class.	2nd Class.	3rd Class.	1st Class.	2nd Class.	3rd Class.		Government.	Municipal.	Cantonment.	Local Fund. 1st Class.	Local Fund. 2nd Class.	Local Fund. 3rd Class.	Local Fund. Candidates.	Native States.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		20
	THE WESTERN REGISTRATION DISTRICT.																			
	Administrative Charges	1	..	1	1	4	..	..	..	2	..	..	..	..	..	..	..	..		10
1	Khandesh Collectorate	..	..	..	..	..	..	..	..	..	..	1	..	1	7	17	..	..		26
2	Násik do.	..	..	..	..	..	..	..	..	..	..	1	..	1	5	6	..	..		13
3	Thána do.	..	..	..	..	..	..	..	..	..	..	2	..	1	5	6	1	1		14
4	Kolába do.	..	..	..	..	..	..	..	..	..	..	2	..	1	3	7	1	2		12
	Total ..	1	..	1	1	4	..	..	..	2	..	6	..	4	20	36	2	3		75
	THE PRESIDENCY CIRCLE.																			
	Administrative Charges	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..
5	Bombay	..	..	..	..	..	1	..	..	17	..	9	..	..	..	..	..	..		3
	Total ..	..	1	..	..	..	1	..	..	17	..	9	..	..	..	..	..	..		3
	THE CENTRAL REGISTRATION DISTRICT.																			
	Administrative Charges	1	..	1	1	4	..	..	..	2	..	..	..	..	..	..	..	..		10
6	Ahmednagar Collectorate	..	..	..	..	..	..	..	..	..	..	1	..	1	5	8	1	..		15
7	Poona do.	..	..	..	..	..	..	..	..	..	..	2	1	1	5	8	1	..		17
8	Sholápur do.	..	..	..	..	..	..	..	..	..	..	3	..	1	3	5	1	1		13
9	Sátára do.	..	..	..	..	..	..	..	..	..	..	1	..	1	5	12	2	6		25
10	Ratnágiri do.	..	..	..	..	..	..	..	..	..	..	1	..	1	6	6	1	3		17
	Total ..	1	..	1	1	4	..	..	..	2	..	8	1	5	24	39	6	10		97
	THE SOUTHERN REGISTRATION DISTRICT.																			
	Administrative Charges	1	..	1	1	2	..	..	..	2	..	..	..	..	..	..	..	..		8
11	Belgaum Collectorate	..	..	..	..	..	..	..	..	..	..	2	..	1	3	11	1	..		16
12	Dhárwár do.	..	..	..	..	..	..	..	..	..	..	3	..	1	5	11	1	1		21
13	Bijápur do.	..	..	..	..	..	..	..	..	..	..	1	..	1	3	7	1	..		12
14	Kánara do.	..	..	..	..	..	..	..	..	..	..	1	..	1	3	9	1	..		13
15	Kolhápur States	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	13		10
16	Southern Marátha Jághirs ..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	15		16
	Total ..	1	..	1	1	3	..	..	1	2	..	7	..	4	14	38	6	29		95
	THE EASTERN GUJARA'T REGISTRATION DISTRICT.																			
	Administrative Charges	1	..	1	1	3	..	..	..	2	..	..	..	..	..	..	..	..		9
17	Surat Collectorate	..	..	..	..	..	..	..	..	..	..	2	..	1	3	5	1	3		14
18	Broach do.	..	..	..	..	..	..	..	..	..	..	1	..	1	1	3	1	..		6
19	Kaira do.	..	..	..	..	..	..	..	..	..	..	1	..	1	3	6	1	1		13
20	Panch Mahals	..	..	..	..	..	..	..	..	..	..	..	..	1	2	3	1	..		6
21	Ahmedabad Collectorate	..	..	..	..	..	..	..	..	..	..	3	..	1	3	8	1	..		16
22	Mahi Kántha Agency	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8		8
23	Rewa Kántha do.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	13		12
	Total ..	1	..	1	1	3	..	..	..	2	..	7	..	5	12	25	5	25		83
	THE WESTERN GUJARA'T CIRCLE.																			
	Administrative Charges	..	1	..	..	..	..	1	1	2	..	..	..	..	..	..	..	5		6
24	Káthiáwár	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	30		36
25	Palanpur	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	6		7
	Total ..	..	1	..	..	..	..	1	1	2	2	..	..	..	..	..	..	41		49
	THE SIND REGISTRATION DISTRICT.																			
	Administrative Charges	1	1	1	1	4	..	..	..	2	..	..	..	..	..	..	..	..		10
26	Karachi Collectorate	..	..	..	..	..	..	..	..	..	..	2	..	1	4	5	1	..		10
27	Hyderabad do.	..	..	..	..	..	..	..	..	..	..	1	..	2	5	6	1	..		14
28	Thar and Párkar	..	..	..	..	..	..	..	..	..	..	..	..	1	2	4	1	..		7
29	Shikárpur Collectorate	..	..	..	..	..	..	..	..	..	..	5	..	1	6	9	1	3		23
30	Upper Sind Frontier	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	1	..		4
	Total ..	1	1	1	1	4	..	..	..	2	..	8	..	6	18	26	5	3		68
	THE BARODA CIRCLE.																			
31	Baroda States	..	..	1	1	1	..	..	..	..	..	..	..	..	..	..	..	31		34
	THE CUTCH CIRCLE.																			
32	Cutch States	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	17		19
	IN THE ADEN MUNICIPALITY.																			
33	Aden	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..		1
34	KHELAT	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..		..
	TOTAL FOR THE BOMBAY PRESIDENCY.	5	3	6	6	19	2	1	2	29	2	46	1	24	88	164	24	159		524

DEPARTMENT.

in the Bombay Presidency during the year 1886-87.

Expenditure.				Paid from							
Pay of Establishment.	Travelling Allowances.	Contingencies.	Total Cost.	Provincial Funds.	Local Funds.	Municipal Funds.	Cantonment Funds.	Native State Funds.	Total.	Number of all successful Vaccinations and Re-vaccinations.	Average Cost of each successful Case.
21	22	23	24	25	26	27	28	29	30	31	32
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.
15,227 0 8	2,118 6 4	561 12 0	17,997 3 9	17,997 3 9	....	....	....	....	17,997 3 9	....	....
6,956 14 9	5 10 0	603 14 4	7,566 7 1	....	7,270 7 1	296 0 0	....	....	7,566 7 1	37,261	0 3 3
3,702 8 2	....	303 14 1	4,006 6 3	....	3,742 6 3	264 0 0	....	....	4,006 6 3	19,593	0 3 3
4,437 6 8	....	432 14 9	4,870 5 5	....	4,019 0 1	489 5 4	....	362 0 0	4,870 5 5	19,468	0 4 0
3,628 0 3	15 14 0	358 12 0	4,002 10 3	....	3,283 3 4	203 6 11	....	511 0 0	4,002 10 3	15,932	0 4 0
33,951 14 6	2,199 14 4	2,261 3 11	38,443 0 9	17,997 3 9	18,320 0 9	1,252 12 3	....	873 0 0	38,443 0 9	92,254	0 6 8
3,609 10 10	382 6 0	8 0 0	4,000 0 10	4,000 0 10	....	....	....	....	4,000 0 10	....	....
8,998 3	....	4,987 14 8	13,986 2 1	....	....	13,986 2 1	....	....	13,986 2 1	16,839	0 13 3
12,607 14 3	382 6 0	4,995 14 8	17,986 2 11	4,000 0 10	....	13,986 2 1	....	....	17,986 2 11	16,839	1 1 1
17,899 3 9	2,169 12 0	769 9 3	20,838 9 0	20,718 9 0	....	....	....	120 0 0	20,838 9 0	....	....
4,163 3 9	....	261 7 3	4,424 11 0	....	4,137 9 6	287 1 6	....	....	4,424 11 0	31,046	0 2 3
5,039 4 10	....	612 15 3	5,652 4 1	....	4,151 14 7	954 0 0	536 5 6	....	5,652 4 1	23,349	0 3 2
3,785 15 6	....	281 11 3	4,067 10 9	....	2,814 13 6	980 6 3	....	272 7 0	4,067 10 9	25,854	0 2 6
6,631 0 10	....	252 2 0	6,883 2 10	....	5,219 2 4	294 13 0	....	1,469 3 6	6,983 2 10	48,945	0 2 3
4,505 9 6	....	329 10 10	4,835 4 4	....	3,973 5 0	116 6 0	....	745 9 4	4,835 4 4	34,050	0 2 3
42,024 6 2	2,169 12 0	2,607 7 10	46,801 10 0	20,718 9 0	20,306 12 11	2,632 10 9	536 5 6	2,607 3 10	46,801 10 0	1,68,244	0 4 5
13,474 2 10	2,258 0 6	1,013 3 10	16,745 7 2	16,745 7 2	....	....	....	....	16,745 7 2	....	....
4,634 13 6	....	584 3 0	5,219 0 6	....	4,730 11 3	488 5 3	....	....	5,219 0 6	24,683	0 3 4
5,634 13 6	....	722 4 4	6,357 1 10	....	5,497 4 1	583 8 9	....	276 5 0	6,357 1 10	27,474	0 3 8
3,481 12 3	....	410 6 9	3,892 3 0	....	3,784 3 0	108 0 0	....	....	3,892 3 0	27,699	0 2 10
3,889 12 10	....	231 7 1	4,092 3 11	....	3,967 11 5	124 3 6	....	....	4,092 3 11	9,160	0 7 2
4,358 15 8	....	190 14 5	4,549 14 1	....	....	....	....	4,549 14 1	4,549 14 1	26,335	0 2 9
4,187 2 3	123 16 0	159 9 9	4,470 11 0	....	....	....	....	4,470 11 0	4,470 11 0	14,493	0 4 11
39,632 8 10	2,381 15 6	3,312 1 2	45,326 9 6	16,745 7 2	17,979 13 9	1,304 6 6	....	9,296 14 1	45,326 9 6	1,24,684	0 5 10
15,544 12 3	2,138 14 0	812 6 10	18,496 1 1	18,496 1 1	....	....	....	....	18,496 1 1	....	....
3,999 7 1	4 6 0	322 8 3	4,326 5 4	....	2,803 2 9	617 15 7	....	805 3 0	4,226 5 4	25,523	0 2 8
1,729 13 9	....	138 2 9	1,868 0 6	....	1,600 7 6	267 9 0	....	....	1,868 0 6	10,099	0 2 11
3,443 3 0	8 7 6	256 5 8	3,708 0 2	....	3,055 7 2	339 2 6	....	313 6 6	3,708 0 2	28,213	0 2 1
1,722 6 1	2 6 6	142 0 4	1,866 12 11	....	1,866 12 11	....	....	....	1,866 12 11	10,631	0 3 0
4,131 1 10	20 4 0	329 2 3	4,480 8 1	....	3,590 9 11	889 14 2	....	....	4,480 8 1	29,758	0 2 5
2,488 7 5	....	145 6 9	2,633 14 2	....	....	....	....	2,633 14 2	2,633 14 2	15,798	0 2 9
3,092 8 0	....	194 2 0	3,286 10 0	....	....	....	....	3,286 10 0	3,286 10 0	17,002	0 2 11
36,051 11 5	2,174 6 0	2,340 2 10	40,566 4 3	18,496 1 1	12,916 8 3	2,114 9 3	....	7,039 1 8	40,566 4 3	1,36,814	0 4 9
11,220 3 8	1,894 2 0	600 15 3	13,715 4 11	13,115 4 11	....	....	....	600 0 0	13,715 4 11	....	....
11,491 1 4	2,861 0 0	657 6 7	15,009 7 11	252 0 0	....	....	....	14,757 7 11	15,009 7 11	84,265	0 2 10
2,012 0 0	....	25 7 6	2,037 7 6	126 0 0	....	....	126 0 0	1,785 7 6	2,037 7 6	19,359	0 1 8
24,723 5 0	4,775 2 0	1,283 13 4	30,762 4 4	13,493 4 11	....	....	126 0 0	17,142 15 5	30,762 4 4	1,03,624	0 4 9
15,966 5 2	2,009 9 8	636 8 0	18,612 6 10	17,148 0 3	....	1,464 6 7	....	....	18,612 6 10	....	....
3,299 1 2	757 8 10	229 2 7	4,285 12 7	....	3,685 12 7	600 0 0	....	....	4,285 12 7	18,033	0 3 10
4,691 13 4	776 11 9	312 0 11	5,180 10 0	....	4,844 10 0	336 0 0	....	....	5,180 10 0	24,199	0 3 5
1,991 1 0	495 5 8	164 7 3	2,590 13 11	....	2,590 13 11	....	....	....	2,590 13 11	11,013	0 3 9
6,953 5 9	231 10 11	481 2 8	8,417 3 4	....	5,797 4 5	1,302 14 11	....	1,317 0 0	8,417 3 4	36,433	0 3 8
1,177 5 9	297 4 1	104 4 6	1,578 14 4	....	1,578 14 4	....	....	....	1,578 14 4	6,635	0 3 10
33,479 0 2	5,258 2 11	1,928 9 11	40,665 13 0	17,148 0 3	18,497 7 3	3,703 5 6	....	1,317 0 0	40,665 13 0	96,313	0 6 9
11,866 14 3	234 8 3	535 0 0	12,376 6 6	....	....	....	....	12,376 6 6	12,376 6 6	66,677	0 3 0
3,156 3 11	3,664 10 3	7 6 1	6,828 4 3	....	....	....	....	6,828 4 3	6,828 4 3	21,174	0 5 2
420 0 0	....	....	420 0 0	....	....	420 0 0	....	....	420 0 0	735	0 9 2
....	....	....	....	....	....	....	....	....	....	111	....
2,37,683 14 6	23,240 13 3	19,251 11 9	2,80,176 7 6	1,08,508 11 0	88,020 10 11	25,413 14 4	662 5 6	57,480 13 9	2,80,176 7 6	8,27,370	0 5 6

B.—DISPENSARY VACCINATION.

Statement No. III, showing Dispensary Vaccination in the Bombay Presidency during the year 1886-87.

Districts.		Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination.				Re-vaccination.		Percentages of Successful Cases.	
								Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.
									Under 1 year.	1 and under 6.	Total of all Ages				
1		2	3	4			5	6	7	8	9	10	11	12	13
	THE WESTERN REGISTRATION DISTRICT.			Males.	Females.	Total.									
Khándesh Collectorate.	Sháháda	...	...	52	53	105	105	105	54	43	97	...	...	92·38	...
	Nandurbár	...	...	110	85	195	195	195	100	73	173	...	...	88·72	...
	Taloda	...	...	26	29	55	55	55	33	5	38	...	...	69·05	...
	Párola	...	...	P. 287 R. 23	347 37	634 60	694	634	470	125	596	60	54	94·01	90·80
	Erandol	...	...	202	194	396	396	399	259	133	394	...	...	99·49	...
	Dharangaon... ...	...	...	P. 39 R. 14	27 ...	66 14	80	66	51	14	66	14	14	100·	100·
	Pimpalner	...	...	P. 48 R. 4	57 ...	105 4	109	105	64	41	105	4	4	100·	100·
	Bhadgaon	...	...	73	44	117	117	117	69	39	108	...	...	92·31	...
	Shirpur	...	...	P. 169 R. 1	178 3	347 4	351	347	283	55	341	4	4	98·27	100·
	Chopda	...	...	P. 5 R. 6	2 8	7 14	21	7	5	2	7	14	14	100·	100·
	Total ...	...	...	P. 1,011 R. 48	1,016 48	2,027 96	212	2,030	1,388	530	1,925	96	90	94·97	93·75
Násik Collectorate.	Sinnar	...	...	78	88	166	166	167	103	51	155	...	...	93·37	...
	Dindori	...	...	59	66	125	125	125	108	13	121	...	...	96·80	...
	Yeola	...	...	178	151	329	329	329	205	114	320	...	...	97·26	...
	Málegaon	...	...	110	121	231	231	231	54	175	231	...	...	100·	...
	Peint...	...	...	70	46	116	116	116	49	45	97	...	...	83·62	...
	Pimpalgaon B. ...	...	...	41	34	75	75	75	61	9	70	...	...	93·33	...
	Satána	...	...	47	50	97	97	97	91	5	97	...	...	100·	...
	Total ...	...	...	583	556	1,139	163	1,140	671	412	1,091	...	...	95·79	...
Thána Collectorate.	Bándora	...	...	P. 176 R. 4	204 76	380 80	460	418	204	113	319	80	32	83·95	40·00
	Bhiwndi	...	...	62	59	121	121	121	51	50	103	...	...	85·12	..
	Chinchni	...	...	41	39	80	80	80	34	41	79	...	...	98·75	...
	Kurla	...	...	P. 37 R. 40	142 3	279 43	322	279	135	130	265	43	13	94·48	30·23
	Bassein	...	...	55	30	85	85	85	53	25	79	...	...	92·94	...
	Máhim	...	...	79	83	162	162	162	111	49	161	...	...	99·38	...
	Mátheran	...	...	2	2	4	4	4	1	...	1	...	...	25·00	...
	Sháhápur	...	...	P. 17 R. 4	19 2	36 6	42	36	26	10	36	6	6	100·	100·
	Umargaon	...	...	6	7	13	13	13	3	8	12	...	...	92·31	...
	Total ...	..	...	P. 575 R. 48	585 81	1,160 129	143	1,198	618	426	1,055	129	51	90·95	39·53
Kolába Collectorate.	Mahád	...	...	P. 24 R. 1	24 3	48 4	52	48	32	11	43	4	4	89·58	100·
	Total ...	...	...	P. 24 R. 1	24 3	48 4	52	48	32	11	43	4	4	89·58	100·
	TOTAL FOR THE WESTERN REGISTRATION DISTRICT.	...	...	P. 2,193 R. 97	2,181 132	4,374 229	170	4,416	2,709	1,379	4,114	229	145	94·06	63·32
	THE PRESIDENCY CIRCLE.														
Bombay City.	Her Majesty's Common Jail	...	...	R. 25	5	30	30	...	...	...	...	30	5	...	16·67
	Her Majesty's House of Correction ...	..	...	R. 117	...	117	117	...	...	...	...	117	35	...	29·91
	TOTAL FOR THE PRESIDENCY CIRCLE ...	...	...	R. 142	5	147	73	...	...	...	...	147	40	...	27·21

Statement No. III., showing Dispensary Vaccination, &c.—*continued.*

Districts.		Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination.				Re-vaccination.		Percentages of Successful Cases.	
								Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.
									Under 1 year.	1 and under 6.	Total of all Ages.				
1		2	3	4			5	6	7	8	9	10	11	12	13
	THE CENTRAL REGISTRATION DISTRICT.			Males.	Females.	Total.									
Ahmednagar Collectorate.	Shevgaon	...	...	21	35	56	56	56	28	11	41	...	...	73·21	...
	Nevása	...	...	17	26	43	43	43	35	7	42	...	..	97·67	...
	Total ...	...	...	38	61	99	49	99	63	18	83	...	...	83·84	...
Poona Collectorate.	A'landi	...	...	P. 15	15	30	40	30	16	...	16	10	7	53·33	70·00
				R. 4	6	10									
	Indápur	...	...	34	30	64	64	64	31	25	56	...	...	87·50	...
	Sásvad	...	...	63	66	129	129	129	50	75	126	...	...	97·67	...
	Jejuri	...	...	P. 28	21	49	50	49	34	14	48	1	1	97·96	...
				R. 1	...	1									
	Bárámati	...	...	33	67	100	100	100	84	16	100	...	...	100·	100·
	Talegaon Dábháda ...	...	...	6	6	12	12	12	2	1	3	...	...	25·00	...
	Total ...	...	...	P. 179	205	384	66	384	217	131	349	11	8	90·89	72·73
				R. 5	6	11									
Sholápur Collectorate.	Karmála	...	...	37	45	82	82	82	60	13	73	...	...	89·02	...
	Akhúj	...	...	30	35	65	65	65	35	13	48	...	...	73·85	...
	Total ...	...	...	67	80	147	73	147	95	26	121	...	...	82·31	...
Sátára Collectorate.	Karád	...	...	P. 100	93	193	196	193	153	36	189	3	...	97·93	...
				R. 2	1	3									
	Pátan	...	...	46	34	80	80	80	67	8	75	...	...	93·75	...
	Wái	...	...	86	76	162	162	162	55	100	159	...	...	98·95	...
	Islámpur	...	...	26	30	56	56	56	19	12	31	...	...	55·36	...
	Mhasvad	...	...	P. 109	108	217	220	220	133	70	204	3	2	94·01	66·67
				R. 3	...	3									
	Puscsávli	...	...	53	52	105	105	105	101	3	105	...	...	100·	...
	Tásgaon	...	...	56	54	110	110	110	64	28	92	...	...	83·64	...
	Total ...	...	...	P. 476	447	923	132	926	592	257	855	6	2	92·63	33·33
				R. 5	1	6									
Ratnágiri Collectorate.	Dápoli	...	...	7	14	21	21	21	17	4	21	...	...	100·	...
Native States.	Akalkot	...	...	P. 112	106	218	219	218	184	24	208	1	1	95·41	100·
				R. 1	...	1									
	Sávantvádi	...	...	P. 204	188	392	430	392	242	139	383	38	26	97·70	68·42
				R. 38	...	38									
	Kudál	...	...	12	15	27	27	28	16	11	27	...	...	100·	...
	Bánda	...	...	4	4	8	8	8	7	1	8	...	...	100·	...
	Native States Total...	...	...	P. 332	313	645	171	646	449	175	626	39	27	97·05	69·23
				R. 39	...	39									
	TOTAL FOR THE CENTRAL REGISTRATION DISTRICT	...	...	P. 1,099	1,120	2,219	103	2,223	1,433	611	2,055	56	37	92·61	66·07
				R. 49	7	56									

Statement No. III., showing Dispensary Vaccination, &c.—*continued.*

	Districts.	Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination.				Re-vaccination.		Percentages of Successful Cases.	
								Total.	Successful.			Total.	Successful.	Primary	Re-vaccination.
									Under 1 year.	1 and under 6.	Total of all Ages.				
	1	2	3	4			5	6	7	8	9	10	11	12	13
	THE SOUTHERN REGISTRATION DISTRICT.			Males.	Females.	Total.									
Belgaum Collectorate.	Belgaum Jail ...	..	...	28	6	34	34	34	...	...	12	...	...	35·29	...
	Saundatti	...	...	107	116	223	223	223	121	101	222	...	...	99·56	...
	Gokák	...	...	71	60	131	131	131	77	44	121	...	...	92·37	...
	Total ...	...	...	206	182	388	129	388	198	145	355	...	...	91·49	...
Bijápur Collectorate.	Indi	...	...	P. 89 R. 3	92 ...	181 3	184	181	146	30	176	3	1	97·24	33·33
	Shindgi	...	...	51	53	104	104	104	81	8	89	...	...	85·58	...
	Bágevádi	...	...	102	88	190	190	190	154	25	180	...	...	94·74	...
	Ilkal	...	...	P. 158 P. 1	150 ...	308 1	309	308	199	106	305	1	...	99·03	...
	Bijápur	...	...	P. 2 R. 2	2 ...	4 2	6	4	2	1	4	2	...	100·	...
	Muddebihál	...	...	29	12	41	41	41	22	11	33	...	...	80·49	...
	Total ...	...	...	P. 431 R. 6	397 ...	828 6	139	828	604	181	787	6	1	95·05	16·67
Kánara Collectorate.	Honávar	...	...	P. 50 R. 2	51 2	101 4	105	101	21	69	98	4	4	97·03	100·
	Siddápur	...	...	5	6	11	11	11	1	6	7	...	...	63·64	...
	Yellápur	...	...	13	15	28	28	28	10	14	27	...	...	96·43	...
	Haliyál	...	...	P. 33 R. 2	34 1	67 3	70	68	43	11	54	3	...	80·60	...
	Mundgod	...	...	8	11	19	19	19	11	8	19	...	...	100·	...
	Total ...	...	...	P. 109 R. 4	117 3	226 7	47	227	86	108	205	7	4	90·71	57·14
Southern Marátha Jághírs.	Sángli	...	...	P. 211 R. 2	175 1	386 3	389	386	196	141	341	3	3	88·34	100·
	Sháhápur	..	...	P. 151 R. 17	148 ...	299 17	316	299	137	119	259	17	3	86·62	17·65
	Mangalvedha ...	...	...	225	185	410	410	410	326	62	388	...	...	94·63	...
	Terdál	...	...	113	119	232	232	233	112	97	214	...	...	92·24	...
	Shirhatti	...	...	57	51	108	108	109	87	10	97	...	...	89·31	...
	Kuchi	...	...	P. 55 R. ...	37 1	92 1	93	92	81	9	90	1	1	97·83	100·
	Miraj...	...	...	P. 69 R. 8	59 2	128 10	138	130	88	35	123	10	2	96·09	20·00
	Budgaon	...	...	51	36	87	87	87	49	13	62	...	...	71·26	...
	Mudhol	...	...	P. 87 R. 6	83 ...	170 6	176	170	85	78	163	6	2	95·88	33·33
	Rámdurg	...	...	54	34	88	88	88	57	27	84	...	...	95·45	...
	Total ...	...	...	P. 1,073 R. 33	927 4	2,000 37	204	2,004	1,218	591	1,821	37	11	91·05	29·73
	Total for the Southern Registration District.	...	...	P. 1,819 R. 43	1,623 7	3,442 50	145	3,447	2,106	1,025	3,168	50	16	92·04	32·00

Statement No. III., showing Dispensary Vaccination, &c.—*continued.*

Districts.		Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the Season.	Total Number of Persons vaccinated.				Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination.				Re-vaccination.		Percentages of Successful Cases.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.
										Under 1 year.	1 and under 6.	Total of all Ages.				
1		2	3	4				5	6	7	8	9	10	11	12	13
	THE EASTERN GUJARÁT REGISTRATION DISTRICT.			Males.	Females.	Total.										
Surat Collectorate.	Ránder	...	...	131	121	252		252	252	171	79	252	...	..	100·	...
	Bárdoli	...	...	69	66	135		135	135	103	27	131	...	...	97·04	...
	Bulsár	...	...	P. 199	180	379		402	379	142	202	357	23	18	94·20	78·26
				R. 13	10	23										
	Kálliawari	...	...	62	53	115		115	115	71	33	106	...	...	92·17	...
	Khergam	...	...	45	51	96		96	97	80	16	96	...	...	100·	
	Total ...	...	...	P. 506	471	977		200	978	567	357	942	23	18	96·42	78·26
				R. 13	10	23										
Broach Collectorate.	Iláv	...	...	16	29	45		45	45	40	5	45	...	...	100·	..
Kaira Collectorate.	Kapadvanj	...	...	230	226	456		456	456	321	97	419	...	...	91·89	...
	Mehmadabad ...	...	..	123	116	239		239	239	184	14	198	...	...	82·85	...
	Kaira Jail	...	...	96	1	97		97	97	..	...	92	...	...	94·85	...
	Total ...	...	...	449	343	792		264	792	505	111	709	...	...	89·52	...
Ahmedabad Collectorate.	Dholera	...	...	94	87	181		181	181	58	113	171	...	...	94·48	...
	Khárághoda	...	...	48	33	81		81	89	32	31	65	...	...	80·25	...
	Total ...	...	...	142	120	262		131	270	90	144	236	...	...	90·08	...
Sachin Agency.	Dumas	...	...	39	29	68		68	68	51	15	66	...	...	97·06	...
Rewa Kantha States.	Lunávada	...	...	62	41	103		103	104	18	61	79	...	...	76·70	...
Mahi Kantha States.	Sádra	...	...	P. 75	59	134		136	134	118	3	122	2	2	91·04	100·
				R. 2	...	2										
	Native States Total ...	...	...	P. 176	129	305		102	306	187	79	267	2	2	87·54	100·
				R. 2	...	2										
	TOTAL FOR THE EASTERN GUJARAT REGISTRATION DISTRICT.	...	...	P. 1,289	1,092	2,381		172	2,391	1,389	696	2,199	25	20	92·36	80·00
				R. 15	10	25										

Statement No. III., showing Dispensary Vaccination, &c.—*continued.*

Districts.		Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination.				Re-vaccination.		Percentages of successful Cases.	
								Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.
									Under 1 year.	1 and under 6.	Total of all Ages.				
1		2.	3	4			5	6	7	8	9	10	11	12	13
	THE WESTERN GUJARÁT CIRCLE.			Males.	Females.	Total.									
Káthiáwár.	Wadhwán	...	...	99	85	184	184	188	113	35	148	...	...	80·43	...
	Mánekváda	...	...	13	13	26	26	26	5	16	21	...	...	80·77	...
	Total ...	...	...	112	98	210	205	214	118	51	169	...	...	80·48	...
Native States.	Gondal	...	...	P. 55 R. 4	46 6	101 10	111	101	91	5	96	10	8	95·05	80·00
	Upleta	...	...	P. 145 R. 16	156 4	301 20	321	306	234	53	288	20	15	95·68	75·00
	Dhorají	...	...	P. 184 R. 2	185 ...	369 2	371	369	287	79	369	2	2	100·	100·
	Bháyávadar	...	...	P. 125 R. 1	113 1	238 2	240	238	188	44	232	2	1	97·48	50·00
	Sársai	...	...	45	53	98	98	98	88	10	98	...	...	100·	..
	Total ...	...	...	P. 554 R. 23	553 11	1,107 34	228	1,112	888	191	1,083	34	26	97·83	76·47
	TOTAL FOR THE WESTERN GUJARÁT CIRCLE.	..	...	P. 666 R. 23	651 11	1,317 34	193	1,326	1,006	242	1,252	34	26	95·06	76·47
	THE SIND REGISTRATION DISTRICT.														
Karáchi Collectorate.	Karáchi Jail ...	...	...	P. 2 R. 351	.. 4	2 355	357	2	1	...	1	355	46	50·00	12·96
	Koti Bandar... ...	...	...	11	6	17	17	17	13	4	17	...	...	100·	...
	Mirpur Batoro ...	...	...	12	12	24	24	24	20	4	24	...	...	100·	...
	Tatta	...	...	P. 63 R. 2	23 ...	86 2	88	86	23	25	48	2	2	55·81	100·
	Jerruck	...	...	P. 13 R. 30	10 ...	23 30	53	23	20	2	22	30	24	95·65	80·00
	Sehwan	...	...	40	23	63	63	63	37	24	62	...	...	98·41	...
	Tháno Bula Khán ...	...	...	4	7	11	11	11	...	1	1	...	...	9·09	...
	Total ...	...	...	P. 145 R. 383	81 4	226 387	88	226	114	60	175	387	72	77·43	18·60
Hyderabad Collectorate.	Tháru Sháh	...	...	P. 27 R. 3	33 ...	60 3	63	60	28	23	51	3	2	85·00	66·67
	Hála	...	...	P. 18 R. 1	17 ...	35 1	36	35	29	...	29	1	1	82·86	100·
	Tando	...	...	10	10	20	20	20	16	2	18	...	...	90·00	...
	Tando Bago	...	...	P. 15 R. 2	22 ...	37 2	39	37	10	27	37	2	2	100·	100·
	Mirpur Khás ...	...	...	P. 8 R. 2	12 ...	20 2	22	20	20	...	20	2	1	100·	50·00
	Total ...	...	...	P. 78 R. 8	94 ...	172 8	36	172	103	52	155	8	6	90·12	75·00
Tharand Párkar.	Khipra	...	...	25	15	40	40	40	16	19	35	...	...	87·50	...

Statement No. III., showing Dispensary Vaccination, &c.—*continued.*

Districts.	Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination.				Re-vaccination.		Percentages of successful cases.	
							Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.
								Under 1 year.	1 and under 6.	Total of all Ages				
1	2	3	4			5	6	7	8	9	10	11	12	13
THE SIND REGISTRATION DISTRICT—*continued.*			Males.	Females.	Total.									
Shikárpur Collectorate. — Mehar	...	...	29	21	50	50	50	36	7	43	...	...	86·00	...
Shikárpur Collectorate. — Kambar	...	...	102	84	186	186	186	164	20	184	..	...	98·92	...
Total ...	...	...	131	105	236	118	236	200	27	227	...	...	96·19	...
Upper Sind Frontier. — Jacobabad	...	...	15	7	22	22	23	...	...	5	...	...	22·73	...
TOTAL FOR THE SIND REGISTRATION DISTRICT	...	...	P. 394 R. 391	302 4	696 395	68	697	433	158	597	395	78	85·78	19·75
THE BARODA CIRCLE.														
Native States. — Sankheda	...	...	22	20	42	42	42	36	4	42	...	...	100·	...
Native States. — Sávli	...	...	40	36	76	76	76	54	21	75	...	...	98·68	...
Native States. — Sojitra	...	...	11	2	13	13	13	5	2	7	...	...	53·85	...
Native States. — Padra...	...	...	73	42	115	115	115	94	18	112	...	...	97·39	...
Native States. — Pátan...	...	...	63	52	115	115	115	84	31	115	...	...	100·	...
Native States. — Dehegam	...	...	37	29	66	66	66	37	27	66	...	...	100·	...
Native States. — Vadnagar	...	...	99	112	211	211	211	198	13	211	...	...	100·	...
Native States. — Vijápur	...	...	111	91	202	202	202	146	53	199	...	...	98·51	...
Native States. — Gándevi	...	...	70	78	148	148	148	128	20	148	...	...	100·	...
Native States. — Bet	...	...	34	26	60	60	60	18	38	60	...	...	100·	...
Native States. — Amreli Hospital ...	...	...	207	174	381	381	381	246	130	379	...	...	99·48	...
Native States. — Dámnagar	...	...	38	31	69	69	69	45	24	69	...	...	100·	...
Native States. — Dhari Battalion Hospital	...	...	19	11	30	30	30	19	10	30	...	...	100·	...
Native States. — Vyara	...	...	23	25	48	48	48	22	24	46	...	...	95·83	...
Native States. — Kathor	...	..	26	17	43	43	43	35	4	39	...	...	90·70	...
Native States. — Kadi Civil Hospital...	...	...	85	68	153	153	153	116	24	141	...	...	92·16	...
Native States. — Dwárka Hospital ...	...	...	7	5	12	12	12	8	3	11	...	...	91·67	...
Native States. — Kálol	...	...	30	17	47	47	47	46	1	47	...	...	100·	...
Native States. — Sidhpur	...	...	23	10	33	33	33	23	10	33	...	...	100·	...
Native States. — Kodinar	...	...	56	52	108	108	108	52	43	101	...	...	93·52	...
TOTAL FOR THE BARODA CIRCLE ..	...	...	1,074	898	1,972	99	1,972	1,412	500	1,931	...	...	97·92	...
ADEN — SHAIK OTHMAN ...	...	...	362	211	573	573	573	52	263	506	...	...	88·31	...
ADEN — STEAMER POINT ...	...	...	P 337 R 6	32 ...	369 6	375	369	30	98	369	6	6	100·	100·
TOTAL ...	...	...	P. 699 R. 6	243 ...	942 6	474	942	82	361	875	6	6	92·89	100·
BUSHIRE...	...	...	78	99	177	177	177	35	113	151	...	...	85·31	...
MUSKAT	...	...	P. 108 R. 1	71 ...	179 1	180	179	17	82	163	1	...	91·06	100·
TOTAL FOR THE — BRITISH TERRITORY	...	...	P. 6,098 R. 670	5,362 161	11,460 831	134	11,516	6,350	3,580	10,608	831	302	92·56	36·34
TOTAL FOR THE — NATIVE STATES ...	...	...	P. 3,321 R. 97	2,918 15	6,239 112	144	6,254	4,272	1,587	5,897	112	66	94·52	58·53
GRAND TOTAL FOR THE BOMBAY PRESIDENCY ...	...	...	P. 9,419 R. 767	8,280 176	17,699 943	137	17,770	10,622	5,167	16,505	943	368	93·25	39·02

Comparative Statement No. IV., showing the Number of Persons Primarily Vaccinated and the Number of those Persons who were Successfully Vaccinated in each of the undermentioned official years.

Establishment.	Persons primarily vaccinated.																			
	Years ending 31st March.																			
	1878.		1879.		1880.		1881.		1882.		1883.		1884.		1885.		1886.		1887.	
	Total Number.	Number successfully vaccinated	Total Number.	Number successfully vaccinated	Total Number.	Number successfully vaccinated	Total Number.	Number successfully vaccinated	Total Number.	Number successfully vaccinated	Total Number.	Number successfully vaccinated	Total Number.	Number successfully vaccinated	Total Number.	Number successfully vaccinated	Total Number.	Number successfully vaccinated	Total Number.	Number successfully vaccinated
Government	5,472	5,311	4,630	4,444	3,374	3,220	4,130	3,980	5,563	5,497	5,266	5,225	6,400	6,165	4,397	4,249	4,947	4,545	4,461	4,183
Municipal	50,250	46,355	42,211	39,129	48,318	45,069	49,857	47,361	54,726	52,225	65,208	61,802	59,559	56,670	56,895	54,582	58,083	55,631	57,523	55,484
Local Fund	340,998	326,670	304,420	292,640	322,871	312,124	347,194	337,392	379,008	369,913	419,822	407,635	441,180	426,408	441,340	425,148	471,789	454,756	470,964	451,857
Cantonment	845	804	872	846	839	939	967	967	1,060	1,060	1,471	1,450	1,465	1,449	1,485	1,472	1,518	1,442	1,474	1,402
Native States	246,773	228,333	188,447	174,757	188,196	175,979	213,411	202,210	257,752	246,565	266,280	254,072	284,180	269,598	270,194	253,942	294,426	279,746	300,564	285,003
Dispensary	20,201	17,904	17,887	16,233	19,119	17,406	22,732	21,009	26,813	25,050	28,770	26,733	29,986	27,439	24,014	21,626	20,298	18,926	17,699	16,505
Army ... European	1,313	1,313	494	453	635	604	659	610	571	434	402	390	497	466	328	305	206	188	317	280
Army ... Native	4,203	3,920	3,008	2,719	3,049	2,499	3,555	2,984	3,830	3,179	4,987	4,438	3,698	3,128	3,554	3,121	3,120	2,901	2,970	2,672
Total ...	670,055	630,590	561,969	531,221	586,501	557,840	642,505	616,513	729,323	703,923	792,206	761,745	826,965	791,323	802,207	764,445	854,387	818,135	855,972	817,386

Note.—Re-vaccinations are wholly excluded from this Statement.

Annual Reports: Annual Report of the Sanitary Commissioner for the Government of Bombay for 1886.

No. 2919.

GENERAL DEPARTMENT.

Bombay Castle, 23rd September 1887.

Letter from the Sanitary Commissioner for the Government of Bombay, No. 1514 B., dated 30th June 1887—Submitting his annual report for the year 1886; and adding that it does not contain any passages the immediate publication of which might possibly be regarded as of doubtful expediency.

RESOLUTION.—It is satisfactory to find that the steady improvement in the registration of births which has been observed for several years past continued in the year under report in which the number registered was 581,553 as contrasted with 572,431 in 1885, and the rate per thousand of population 35·34 as contrasted with 34·79 in that year. The improvement, however, was practically confined to the Sind Registration District in which the recorded births were 21,622 in excess of those in 1885, and the rate per thousand of population 29·16 as against 20·2, a result which is highly creditable to the supervising officers concerned. The new system of compiling vital statistics in the offices of Deputy Sanitary Commissioners has worked well, but it must not be supposed that this check on village officers will diminish the necessity for carefully examining village registers in the villages to which they relate, and comparing the entries in them with the statements of the villagers. To the latter check is no doubt partly due the fact that rural are more accurate than urban birth statistics in almost every district in the Presidency.

2. The attention of the district officers concerned should be called to the Sanitary Commissioner's remarks in paragraph 12 of his report. As usual the defective registration of births in Bombay is again specially noticed, and the Governor in Council cannot but regret with Mr. Hewlett the continued neglect of this duty by the leading Municipality. The registered birth rate has been steadily decreasing, year by year, with one unimportant exception, since 1880, in which year it was 26·38 per thousand, as against 18·98 in the year under report. The absolutely worst results brought to notice by Mr. Hewlett are those for the two municipalities in the Thána District, viz., Kalyán and Thána, for which the rates per thousand were 13·40 and 6·09. The steady decline in the registered rate in the latter city since 1883, as shown in the margin, is most unsatisfactory, and seems to show that the performance of this important municipal duty by these Corporations appointed under the Act of 1884 is greatly neglected by them. It should be pointed out to them that a continuance of this neglect will bring marked discredit on their administration. The Sanitary Commissioner states in his 15th paragraph that a high birth rate is not confined to any particular part of the Presidency, but the figures in his previous paragraph do not, it is observed, relate to any of the Konkan districts, regarding which all the statistics in the present report go either to support the idea that its enervating climate has a marked effect in diminishing the birth rate or to confirm the impression that the statistics are carelessly kept as the Sanitary Commissioner complains in several places.

In 1883	18·61
„ 1884	15·98
„ 1885	11·41
„ 1886	6·09

3. The number of deaths registered in 1886 was 381,185 or less than has been registered in any year since 1882 and less by 92,406 than in 1885. The admitted freedom of the Presidency from epidemics during the year under report renders it unsafe to argue that these figures by themselves show an actual falling off in the accuracy of registration, and Mr. Hewlett is not inclined to

think that the work was done less carefully than in previous years, though he clearly shows the urgent need for improvement that still exists, especially in the places mentioned in his 34th paragraph. The recorded rates in some of the Sind districts and in Ratnágiri are strikingly inaccurate. The Governor in Council has read with interest the Sanitary Commissioner's remarks on the death rate of towns and its connexion with sanitation.

4. The almost entire absence of cholera which the Sanitary Commissioner admits is unaccountable and certainly "not due to any diminution of filth in and around the towns and villages in the Presidency" was one of the most remarkable features of the year, in which the deaths from that disease, as compared with 37,287 in 1885 only numbered 167, and of these 83 occurred in seven districts in January when the intensity of the previous year's epidemic suddenly ceased. Mr. Hewlett has, as might be expected, commented on the fact that Bombay was placed in quarantine in December, although the deaths from cholera were only 3 in that month, and 17 in the whole year. It is indeed a matter of surprise and much to be regretted that the Egyptian and Turkish Health Boards should have thought there was occasion in these circumstances for imposing quarantine.

5. The decrease from 2,646 to 876 in deaths from small-pox was sufficiently marked to show that it was not merely accidental or due to less accurate registration, but no such inference can be drawn regarding deaths from fevers, bowel-complaints or "other causes." As regards the expediency of building domes over wells to prevent people from being drowned therein, it may be pointed out that Mr. Hewlett's suggestion has already been dealt with in reviewing his administration report for 1883, by Government and by the Army Sanitary Commission. From a sanitary point of view the suggestion has everything to commend it, but in the existing state of the law and the financial condition of villagers it is hardly practicable or practical.

6. In connexion with vaccination no changes of much importance are reported. The Sanitary Commissioner should be asked whether vaccination statistics cannot in future be prepared for one and the same period as vital statistics. The total number of persons vaccinated in 1886-87 was 903,910, as compared with 907,790 in 1885-86, but the decrease was entirely in re-vaccinations and was due no doubt to the comparative absence of small-pox. The number of infants under one year old vaccinated was only slightly less than in the previous year. The imperfection of Mr. Hewlett's method of comparing the number of such infants vaccinated with the number available was referred to by the Government of India in reviewing his report for last year, and is evident from the accepted inaccuracy of the birth statistics, the unsatisfactory nature of a comparison between birth statistics for the calendar and vaccination statistics for the financial year, and lastly, the obvious mistake of supposing that all deaths of children under one year old must be deducted from births before the number of children *available* for vaccination is obtained. The expenditure on vaccination amounted to Rs. 2,80,176 as compared with Rs. 2,80,593. Ten additional vaccinators were employed.

7. Parts IX. and X. contain a concise summary of what was done and of some things which remain to be done in Military and Civil sanitary works throughout the Presidency.

8. The Bombay Health Officer's report, from which numerous extracts are quoted in the present report, will be separately reviewed by Government. The attention of the Military Department may be invited to the Sanitary Commissioner's observations on the sanitation of barracks, and special care should be taken in future reports to note carefully the result of Mr. Hewlett's alterations in the Ghorpadi barracks at Poona. If the experiment is successful in improving the health of the occupants the question of introducing similar changes elsewhere will have to be promptly considered.

9. No remarks are called for on the paragraphs relating to the Village Sanitation Bill, Mr. Hewlett's opinions as to which are already known to Govern-

ment and have recently been repeated separately. The Governor in Council considers that Mr. Hewlett's memorandum on Ahmedabad sanitation is interesting but controversial and personal matter should be avoided in Administration Reports. Government are not disposed to agree with Mr. Hewlett that the publication of such matter as this in his report is not of doubtful expediency and his reference to it is the more to be regretted as the report generally has been carefully and ably prepared and is full of interest otherwise.

J. DE C. ATKINS,
Under Secretary to Government.

To

The Sanitary Commissioner,
The Surgeon General with the Government of Bombay,
The Military Department of the Secretariat,
The Judicial Department of the Secretariat,
The Political Department of the Secretariat,
The Public Works Department of the Secretariat,
The Commissioner, N. D.,
The Commissioner, C. D.,
The Commissioner, S. D.,
The Commissioner in Sind,
All Collectors, including the Collectors and Deputy Commissioners in Sind,
The Municipal Commissioner for the City of Bombay,
The Compiler, General Administration Report for 1886-87,
The Accountant General.
} With copies of the report.

The Director of Land Records and Agriculture,

The Government of India,
The Secretary of State for India.
} By letter.

The Editors' Table, Bombay,
The Branch Editors' Table, Poona, *care of* the City Magistrate, Poona,
The Editor *Dhárwár Vritt*, Dhárwár (for his own use and for the use of other Editors of Newspapers in Dhárwár).

TWENTY-FOURTH ANNUAL REPORT

OF THE

Sanitary Commissioner for the Government of Bombay,

1887,

WITH

APPENDICES.

Bombay:
PRINTED AT THE GOVERNMENT CENTRAL PRESS.
1888.

CONTENTS.

SECTION I.—METEOROLOGY—Nil.

SECTION II.—EUROPEAN ARMY—Nil.

SECTION III.—NATIVE ARMY—Nil.

SECTION IV.—JAILS—Nil.

SECTION V.

GENERAL POPULATION AND VITAL STATISTICS.

BIRTHS.

PARA.		PAGE
1.	Number of registered births	1
2.	Birth-rate in 1887 compared with previous years from 1877 to 1886 ...	2
3.	Births by months	*id.*
4—6.	Comparison between the number of births registered in each District and Collectorate for 1887 with the number for 1886 and the mean for 10 years	2—4
7—9.	Birth registration in Urban and Rural Districts	4, 5
10—12.	Birth-rates in Tálukás	5, 6
13—16.	Birth-rate in sequence in Towns	6—8
17.	Birth-rates in Cantonments	8, 9
18, 19.	Still-born	9, 10

DEATHS.

20.	Number of deaths	10
21.	Death-rate	*id.*
22.	Male and female death-rates	*id.*
23.	Deaths by Districts	*id.*
24.	Do. Collectorates...	10, 11
25.	Death-rate by do. in sequence...	11, 12
26.	Deaths by Sexes	12
27.	Birth and death-rates compared by Collectorates	*id.*
28.	Deaths by ages...	12, 13
29.	Do. by caste or class	13
30.	Do. by causes	13, 14
31.	Do. by months	14
32.	Number of Circles	*id.*
33—35.	Death-rate in Urban and Rural Districts	14—16
36, 37.	Death-rates in Rural Circles	16, 17
38.	Birth and death-rates in sequence in towns	17, 18
39.	Births and deaths by causes and their ratios per 1,000 of population in each Táluka and Town in each Collectorate	19

WESTERN REGISTRATION DISTRICT.

COLLECTORATES.

40.	Khándesh	19
41.	Násik	20
42.	Thána	20, 21
43.	City of Bombay	21
44.	Kolába	21, 22

CENTRAL REGISTRATION DISTRICT.

Collectorates.

Para.		Page.
45.	Ahmednagar	22
46.	Poona	23
47.	Sholápur	23, 24
48.	Sátára	24
49.	Ratnágiri	24, 25

SOUTHERN REGISTRATION DISTRICT.

Collectorates.

50.	Belgaum	25
51.	Dhárwár	25, 26
52.	Bijápur	26
53.	Kánara	27

EASTERN GUJARA'T REGISTRATION DISTRICT.

Collectorates.

54.	Surat	27, 28
55.	Broach	28
56.	Kaira	28, 29
57.	Panch Mahále	29
58.	Ahmedabad	30

SIND REGISTRATION DISTRICT.

Collectorates.

59.	Karáchi	30
60.	Hyderabad	31
61.	Thar and Párkar	*id.*
62.	Shikárpur	32
63.	Upper Sind Frontier	*id*
64.	Death-rates in Cantonments in British territory	3.
65.	Statistics of Cantonment Bazárs in quasi-foreign territory	33, 34

SECTION VI.

HISTORY OF CHIEF DISEASES.

Cholera.

66.	Mortality in 1887	35
67.	Monthly mortality	*id.*
68.	Death-rates by Collectorates	*id.*
69.	Mortality in Rural Circles	36
70.	High mortality in Towns	37
71.	Villages affected by Cholera	*id.*
72.	Attacks and Deaths	*id.*
73.	Statement appended to Cholera Map	38
74.	Cholera Map	40
75.	Taluka statements showing Cholera deaths and Meteorological conditions	*id.*
76.	Concluding remarks	*id.*
77.	Laws of Cholera	41
78.	Sexennial Cycle	*id.*
79.	Division of period of 21 years into 3 groups	*id.*
80.	No preventive and only palliative measures taken	*id.*
81.	Government has taken no action	42
82.	Deaths in City of Bombay	*id.*
83.	Diminution of Cholera coincident with cleansing of surface	*id.*
84.	Cleanliness in Villages	*id.*
85.	Measures when an outbreak of Cholera takes place	43
86.	Present measures ordered by Government ineffective	*id.*
87.	Government orders on the subject	*id.*
88.	Question should be reconsidered	*id.*

PARA. PAGE.

SMALL-POX.

89. Small-pox mortality by Sexes 44
90. Small-pox deaths since 1876 ... ... *id.*
91. Deaths by Districts and Collectorates ... ... *id.*
92. Deaths by ages 45
93. Monthly Distribution ... ... *id.*

FEVER.

94. Fever mortality by Sexes 45
95. Deaths since 1876 46
96. Deaths by Districts and Collectorates ... ... *id.*
97. Deaths by months 47

BOWEL-COMPLAINTS.

98. Deaths from Bowel-complaints by Sexes 47
99. Deaths since 1876 ... ... *id.*
100. Deaths by Districts and Collectorates 47, 48
101. Deaths by months 48

INJURIES.

102. Deaths from Injuries 48
103. Deaths since 1876 ... ... *id.*
104. Deaths from injuries in 1886 and 1887 arranged by Sexes 49
105. Deaths by Districts and Collectorates 49, 50
106. Snake-bites by months 50
107. Snake-bites by Collectorates 51
108. Details of Injuries 51, 52

OTHER CAUSES.

109. Deaths from other causes 53
110. Deaths since 1876 ... ... *id.*

SECTION VII.

GENERAL HISTORY OF VACCINATION.

111. Preliminary 54
112. Strength of the Department 55
113. Work amongst the Civil and Military Population ... ... *id.*
114. Primary Vaccinations 56
115. Infants successfully vaccinated in the 24 Collectorates ... ... *id.*
116. Results in Primary Vaccinations ... ... *id.*
117. Revaccinations ... ... *id.*
118. Total operations 57
119. Primary Vaccinations by Districts ... ... *id.*
120. Revaccinations by Districts... ... ... *id.*
121. Total operations by Districts ... ... *id.*
122. Percentages of success by Districts ... ... *id.*
123. Ratio to the total population protected... 58
124. Agencies ... ... *id.*
125. Sex ... ... *id.*
126. Race ... ... *id.*
127. Age ... ... *id.*
128. Lymph and animal vaccination 59
129. Expenditure ... ... *id.*
130. Work of Supervising Officers ... ... *id.*
131. Inoculation ... ... *id.*
132. Compulsory Vaccination Act ... ... *id.*
133. Aid from Civil, Revenue and Political Officers ... ... *id.*

SECTION VIII.

SANITARY WORKS—MILITARY.

134—136. Amount expended on Sanitary Works (Military) at each station ... 60, 61

PARA. PAGE.

SECTION IX.

SANITARY WORKS—CIVIL.

137, 138. Annual Income of the Municipalities and the amount expended on conservancy 62
139. Annual Income and Expenditure on conservancy in each Division ... *id.*
140. Water-supply generally ... ... *id.*
141. Northern Division Water-supply ... ... *id.*
142. Central Division do. 66
143. Southern Division do. 71
144. Sind Division do. 73
145. Drainage 75
146. Cesspool 76
147. Scavengering ... ... *id.*
148. Latrines ... . *id.*
149. Urinals 77
150. Markets ... ... *id.*
151. Burial-ground and Cremation Ghâts 78
152. New Works ... ... *id.*

LOCAD FUND CIRCLES.

153. Northern Division—Amount expended on Water Works 80
154. Central Division do. do. ... ... *id.*
155. Southern Division do. do. ... ... *id.*
156. Sind Division do. do. 81

SECTION X.

PERSONAL PROCEEDINGS AND GENERAL REMARKS.

157. Preliminary remarks 82
158. Personal Proceedings ... ... *id.*
159. Meeting with Municipal Commissioners ... ... *id.*
160. Report of Health Officer of Port ... ... *id.*
161. New Bill of Health 82, 83
162. Cattle shipped for Mussowah inspected by a Veterinary Surgeon by order of Government 83
163. Out-going vessels ... ... *id.*
164. Ships' bilges ... ... *id.*
165. Troop-ships ... ... *id.*
166. Bills of Health granted to vessels proceeding to ports round the coast, &c.... *id.*
167. Quarantine at Suez ... ... *id.*
168. Incoming vessels ... ... *id.*
169. Pilgrim ships 83, 84
170. Cholera among Harbour Population 84
171. Insanitary state of Foreshore ... ... *id.*
172. Aid afforded by officers of the Department which, however, was crippled by the absence of 3 out of 6 of its officers ... ... *id.*
173. Departure on furlough of the Consulting Sanitary Engineer whose appointment has not been filled up ... . *id.*
,, Sanitary Engineering a special study ... ... *id.*
,, Experience of the past and present 85
174. Recommendation to bring out from Home a trained Sanitary Engineer ... *id.*
175. Necessity for all officers in Public Works Department being taught the practical details of Sanitary Engineering ... ... *id.*
176. Colonel Ducat's report on Marine Lines sewerage .:. ... ... *id.*
,, Recommendation regarding Municipal sewer in Marine Lines ... ... *id.*
177. Recommendation regarding house drains 86
178. Necessity for regular flushing and for the removal of deposit ... ... *id.*
179. Government orders these recommendations to be carried out ... ... *id.*
180. Ventilation of main sewers of Bombay ... ... *id.*
181. Two systems in operation ... ... *id.*
182. Manhole covers not been opened for a considerable time ... ... *id.*
183. Necessity for frequent cleansing 86, 87
184. House drains; danger of traps being forced 87
185. Freest ventilation required ... ... *id.*
186. Baldwin Latham's opinion ... ... *id.*
187. Sir R. Rawlinson's opinion ... ... *id.*
188. Necessity for providing side ventilation chambers to manholes ... ... *id.*
189. Charcoal ventilation ... ... *id.*

PARA.		PAGE.
190.	Dangerous condition of main sewers	87
191.	Municipal Commissioner's reply	88
192.	Answer to first objection	*id.*
193.	Do. second do.	*id.*
194.	Further remarks by Municipal Commissioner	*id.*
195.	Recommendation that a Committee should be appointed to go into the question and that its report be sent to Army Sanitary Commission for opinion	88, 89
196.	European General Hospital...	89
197.	Recommendation of Committee of 1886 regarding site in which Government concurred	*id.*
198.	Designs made with great care and provided for an excellent Hospital ...	*id.*
„	Designs useless as Government suddenly changes its mind regarding site ...	*id.*
199.	Site...	90
200.	Combined area equals 17½ acres	*id.*
201.	New Hospital and its subsidiary buildings require ample space... ...	*id.*
202.	Reasons why ample space is required	*id.*
203.	Danger of over-crowding	*id.*
204.	Future expansion of Bombay should be taken into account	*id.*
205.	Remonstrance made by Surgeon General Moore, C.I.E.	90—91
206.	Wants of sanitation among rural and town communities	91
207.	Number of villages in the Presidency of Bombay	*id.*
208.	Villages with population under 100	91, 92
209.	Villages with a population between 100 and 200	92
210.	Villages with population under 500	*id.*
211.	Villages with population above 500	*id.*
212.	The Village system under Native rule	*id.*
213.	Has been broken up under English rule	92, 93
214.	The Mahárs the only scavengers	93
215.	A visit of inspection to a large Deccan village	*id.*
216.	Gypsies	*id.*
217.	The Pátel	93, 94
218.	Place of cremation	94
219.	Temple	*id.*
220.	The village tank	*id.*
221.	Improvements required	94, 95
222.	Funeral procession	96
223.	Village dogs	*id.*
224.	Village tree	*id.*
225.	Registration of births and deaths	96, 97
226.	Outskirts of village	97
227.	Prickly pear place of natural resort	*id.*
228.	Recommendations regarding provision of proper places	*id.*
„	Unwholesome excavations	*id.*
„	Brick-kiln	*id.*
229.	The goat-herd	*id.*
„	Village well	97, 98
230.	Tanners	98
231.	Máhárwáda	*id.*
232.	Mángwáda	99
233.	Dying animals	*id.*
234.	Low caste and Mahomedan burial-grounds	*id.*
235.	Blind men, lepers	*id.*
236.	Place of natural resort swamp, &c.	*id.*
„	Various nuisances in river bed up stream	*id.*
„	Lingáyat burial-ground	99, 100
237.	Interior of village	100
„	Gosain	*id.*
238.	Description of houses	*id.*
239.	An interior of better sort of house	100, 101
240.	Backyard	101
„	Privy	*id.*
241.	Covered cesspool	*id.*
242.	Recommendations	*id.*
243.	Upper rooms	*id.*
244.	Infant mortality	*id.*
245.	Ruined house	101, 102
246.	Nuisance in streets	102
247. 248, 249.	An interior of inferior sort of house	102, 103
250.	Open cesspool	103
251.	Dead vermin	*id.*

PARA.		PAGE.
251.	Pit privies	103
252.	Marriage procession	104
253.	Oil-press	*id.*
„	Lohár	*id.*
„	Grinding grain...	*id.*
„	Rice-husking	*id.*
254.	Weavers	*id.*
255.	Butchers	105
256.	Cattle-yards	*id.*
257.	Gowlis and milk	105, 106
258.	Village chávdi	106
„	Bania's shop	*id.*
259.	Sweetmeat-sellers	107
260.	Fruit and vegetable shop	*id.*
261.	Pigments	*id.*
„	Scorpion stone	*id.*
„	Powa	*id.*
„	Husking gram	*id.*
262.	Opium shop	*id.*
„	Liquor-shop	*id.*
263.	Fish and eggs, barbers	*id.*
„	Vaccination	108
264.	Address to villagers on subject of wrong conditions observed	*id.*
265.	Tour in Gujarát—a town of 30,000 inhabitants	*id.*
266.	Fogs due to a damp subsoil...	108, 109
267.	Area of depression	109
268.	Water-supply	*id.*
269.	Wells under trees	*id.*
270.	Unwholesome excavations	*id.*
„	Narrow streets	*id.*
„	Road-side drains	*id.*
271.	Khálkuvás for ablution water	110
272.	Nightsoil arrangements	*id.*
273.	Recommendations	*id.*
„	A fact	*id.*
„	Establishment for removal of night-soil...	*id.*
274.	Surface cleaning	110, 111
275.	Storing of manure	111
276.	Heaps of cow-dung	*id.*
„	A fact	*id.*
277	Wood stacks	*id.*
278.	Tanneries	*id.*
279.	Slaughter-house	*id.*
280.	Offensive trades...	111, 112
281.	Want of proper markets	112
282.	Burning Gháts and burial-grounds	*id.*
283.	Registration of births and deaths	*id.*
284.	Intense fouling of Indian towns and villages	*id.*
285.	Dampness of surface and subsoil	*id.*
286.	Struggle for existence	*id.*
„	The penalty paid for neglect of nature's laws	113
287.	Poverty of the people	*id.*
288.	No establishment for cleaning villages	*id.*
289.	The existing laws regarding village sanitation	*id.*
290.	Persons in any town or place causing obstruction or damage, &c., to residents or passengers liable to a fine, &c.	114
291.	Bombay Act No. VIII of 1867 (Village Police Act) ...	114, 115
292.	do, do. Section XV	115
293.	These sections have always been a dead letter	*id.*
294.	Another step in advance	115—117
295.	Government recognises the only agency by which villages can be cleaned and which Government can maintain on a large scale	117
296.	Government orders a draft bill to be prepared to give effect to measures named in the Resolution	*id.*
297.	First draft bill withdrawn	*id.*
298.	New draft bill utterly inadequate	*id.*
299.	Comparison between new and old draft bills	117, 118
300.	Government of India's views about the draft bill	118
301.	What the new Act should include	118, 119
302.	Law under which Municipalities work	119
303.	Necessity for more clearness in the wording of Acts	*id.*

PARA.		PAGE.
304.	Object of sanitation	120
305.	Milk	120
306.	Procedure	*id.*
307.	Local self-government	*id.*
308.	The good effected by the memoranda of the Army Sanitary Commission ...	*id.*
309.	Government of India's views regarding Municipal towns ...	120, 121
310.	Do. do. do.	121
311.	Failure to get Municipal Commissioners to give effect to wishes of Government of India	*id.*
„	Failure of Municipal Commissioners of Surat to do their duty	*id.*
312.	How are funds to be raised...	121, 122
„	Question involves too important issues to be quietly shelved	122
313.	Reply of Government of India to an application from the Ahmedabad Municipality to raise a loan of Rs. 4,10,000 re-payable within 50 years ...	*id.*
„	Government of India only sanction a loan of Rs. 3,00,000 and order it to be repaid within a period of 30 years	*id.*
314.	Necessity for re-organising the Sanitary Department	*id.*
315 & 316.	Present organisation...	122, 123
317.	It is manifestly undermanned and yet the Finance Committee proposed to abolish 2 Deputy Sanitary Commissioners	123
318.	Increase in staff urgently needed	123, 124
319.	Number of villages and vaccinators much too large for efficient supervision...	124
320.	Health Officer for each Zilla absolutely necessary	*id.*
321.	Who should work under 3 Divisional Sanitary Commissioners	*id.*
„	Duties of Sanitary Commissioner	*id.*
322.	Claims of the Sanitary Commissioners of Madras and Bombay for the appointment of Sanitary Commissioner with the Government of India should be considered	125
323.	An annual conference of the Sanitary Commissioners throughout India suggested	*id.*
324.	Need for sanitation in Native States	*id.*
325.	Loss of revenue resulting from sickness and death	*id.*
326.	Results to be obtained	*id.*
327.	Last word of advice	126

APPENDIX I.

Sanitary Estimate of Villages and Towns inspected by Deputy Sanitary Commissioners and Civil Surgeons ... ... 1—3

APPENDIX II.

Meteorological observations ... ... 5—10

APPENDIX III.

GENERAL POPULATION AND VITAL STATISTICS.

Births registered in the Districts during 1887 2
Deaths do. do. ... ... *id.*
Deaths registered in the Districts during each month of the year 3
Do. in do. according to age ... ... *id.*
Do. in do. according to classes 4
Deaths from different causes in the Districts and Towns during 1887 ... ... 4—6
Do. from cholera in the Districts during each month of the year 6
Do. from small-pox do. do. 7
Do. from fever do. do. ... ... *id.*
Do. from bowel-complaints in do. do. 8

VACCINATION.

Statement No. I.—Particulars of Vaccination during 1887-88 ... ... 9—19
Do. No. II.—Cost of the Department during the year 20, 21
Do. No. III.—Dispensary Vaccination during the year ... ...22—24
Do. No. IV.—Comparative Statement showing the number of persons primarily vaccinated and the number of persons successfully vaccinated in each year from 1878-79 to 1887-88 25

ANNUAL SANITARY REPORT FOR 1887.

SECTION I.—METEOROLOGY. No remarks.

SECTION II.—EUROPEAN ARMY. No remarks.

SECTION III.—NATIVE ARMY. No remarks.

SECTION IV—JAILS. No remarks.

These sections are omitted from this report (*vide* Government of India Resolution No. 118, dated 27th June 1878).

SECTION V.

GENERAL POPULATION AND VITAL STATISTICS.

BIRTHS.

Number of registered births.

In the Presidency of Bombay, including Sind, during the year 1887 the births of 327,500 males and 300,693 females, or a total of 628,193 children, were recorded against 303,376 boys and 278,177 girls, or a total of 581,553 children in 1886. They are thus 46,640 in excess of the number recorded in the previous year, whilst they exceed the mean of the preceding 10 years ending 1886 by 192,676.

Birth-rate in 1887 compared with previous years from 1877 to 1886.

2. The following table shows the number of births registered in each year from 1877 to 1887, their ratios per 1,000 of population, and the proportion of males to females :—

Years.	Population.	Number of Births registered.			Ratio per 1,000 of Population.			In every 100 Births there were.		For every 100 Male Births the Females were.
		Males.	Females.	Children.	Males.	Females.	Children	Males.	Females.	
1877	16,181,741	164,262	147,399	311,661	10·15	9·11	19·26	52·75	47·25	89·73
1878	16,181,741	128,848	114,405	243,253	7·96	7·07	15·03	52·97	47·03	88·89
1879	16,228,774	151,460	136,410	287,870	9·33	8·41	17·74	52·61	47·39	90·06
1880	16,228,774	195,285	175,588	370,873	12·03	10·82	22·85	52·66	47·34	89·91
1881	16,454,414	239,912	219,745	459,657	14·58	13·35	27·93	52·19	47·81	91·59
1882	16,454,414	255,927	235,419	491,346	15·55	14·31	29·86	52·09	47·91	91·98
1883	16,454,414	261,966	239,835	501,801	15·92	14·58	30·50	52·20	47·80	91·55
1884	16,454,414	278,986	255,737	534,723	16·96	15·54	32·50	52·17	47·83	91·67
1885	16,454,414	298,406	274,025	572,431	18·14	16·65	34·79	52·13	47·87	91·83
1886	16,454,414	303,376	278,177	581,553	18·44	16·90	35·34	52·17	47·83	91·69
Mean for 10 years ...	16,354,751	227,843	207,674	435,517	13·93	12·70	26·63	52·32	47·68	91·15
1887	16,454,414	327,500	300,693	628,193	19·90	18·27	38·18	52·13	47·87	91·81

It is satisfactory to notice the progressive improvement which, except in the first three years of famine, has taken place throughout the Presidency in the registration of births. The increase in the years from 1885 to 1887 is to be largely ascribed to the progress which has been effected by the system of compiling the vital statistics in the offices of the Deputy Sanitary Commissioners, where the registers of births as well as those of deaths undergo very complete and searching scrutiny.

Births by months.

3. The following table shows the monthly distribution of births in 1887 as compared with 1886 and with the monthly mean of the previous 10 years :—

	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Mean for 10 years 1877—1886	33,053	30,095	33,853	34,133	35,985	37,716	39,251	38,925	38,487	39,249	37,991	36,781	435,517
1886	44,546	38,747	41,429	44,058	46,197	50,796	51,976	52,955	53,810	54,420	52,389	50,730	581,553
1887	46,977	42,565	48,812	49,807	53,738	58,009	56,774	55,389	54,255	55,789	55,582	52,406	628,193

The greatest number (58,009) was registered in June and the least (42,565) in February. In 1886 the highest number (54,420) took place in October and the lowest (38,747) in February.

Comparison between the number of births registered in each District and Collectorate for 1887 with the number for 1886 and the mean for 10 years.

4. The next table shows the number of births registered in 1887 in each district and collectorate of the Presidency contrasted with those for 1886 and the mean for 10 years :—

Districts.	No.	Collectorates.	Population according to Census of 1881.	Mean for 10 years 1877—1886.		1886.		1887.	
				Number of Births.	Ratio per 1,000 of Population.	Number of Births.	Ratio per 1,000 of Population.	Number of Births.	Ratio per 1,000 of Population.
Western Registration District	1	Khándesh	1,237,231	36,139	31·32	44,811	36·22	50,607	40·90
	2	Násik	781,206	23,583	31·32	28,147	36·03	31,433	40·23
	3	Thána	807,367	20,747	25·20	22,657	28·06	25,643	31·76
	4	City of Bombay	773,196	14,310	20·66	14,679	18·98	15,166	19·61
	5	Kolába	482,830	11,613	27·02	14,551	30·14	15,523	32·15
Central Registration District.	6	Ahmednagar	751,228	24,543	32·28	32,188	42·85	37,279	49·62
	7	Poona	900,621	22,709	25·14	31,165	34·60	35,941	39·91
	8	Sholápur	582,487	16,428	25·80	25,999	44·63	29,081	49·93
	9	Sátára	1,062,350	35,990	33·89	44,988	42·35	48,204	45·37
	10	Ratnágiri	997,090	18,226	18·12	25,077	25·15	27,998	28·08
Southern Registration District.	11	Belgaum	864,014	28,502	31·88	35,821	41·46	38,743	44·84
	12	Dhárwár	882,907	30,585	33·07	40,261	45·60	42,473	48·10
	13	Bijápur	638,493	17,718	24·97	27,182	42·57	33,147	51·91
	14	Kánara	421,840	11,935	29·06	12,989	30·79	13,372	31·70
Eastern Gujarát Registration District.	15	Surat	614,198	19,336	31·63	24,795	40·37	25,737	41·90
	16	Broach	326,930	9,096	27·05	13,175	40·30	12,546	38·37
	17	Kaira	804,800	25,519	32·01	30,643	38·08	30,930	38·43
	18	Panch Mahále	255,479	6,987	27·99	8,757	34·28	9,044	35·40
	19	Ahmedabad	856,324	23,803	28·15	33,287	38·87	31,660	36·97
Sind Registration District.	20	Karáchi	478,688	7,954	17·42	12,659	26·45	13,940	29·12
	21	Hyderabad	754,624	9,868	13·31	19,966	26·46	20,788	27·55
	22	Thar and Párkar	203,344	4,883	25·13	7,783	38·27	7,670	37·72
	23	Shikárpur...	852,986	12,921	15·71	26,671	31·27	28,292	33·17
	24	Upper Sind Frontier ...	124,181	1,472	13·32	3,302	26·59	2,976	23·97

ABSTRACT.

Western Registration District	4,081,830	106,992	27·56	124,845	30·59	138,372	33·90
Central do.	4,293,776	117,896	26·99	159,417	37·13	178,503	41·57
Southern do.	2,807,254	88,790	30·19	116,253	41·41	127,735	45·50
Eastern Gujarát do.	2,557,731	84,741	29·65	110,657	38·72	109,917	38·46
Sind Registration do.	2,413,823	37,098	15·95	70,381	29·16	73,666	30·51
Presidency ...	16,454,414	435,517	26·63	581,553	35·34	628,193	38·18

It will be seen from the abstract of the above table that the number of births recorded in each district in 1887 is higher than in the previous year, except in the district of Eastern Gujarát in which it is lower. The increase in the Central and Southern districts is most remarkable, as the recorded births were 19,086 and 11,482 respectively in excess of those in the previous year, whilst they exceed the mean of the preceding 10 years ending 1886 by 60,607 in the Central and 38,945 in Southern. The decrease in the district of Eastern Gujarát is not serious, as the recorded births in it were only 740 less in 1887 than in 1886.

5. The total increase for the Presidency was 11·55 per 1,000 of population above the mean of the preceding 10 years, and the number of recorded births in 1887 is higher than in 1886 in the following 20 Collectorates, *viz* :—

Khándesh.	Belgaum.
Násik.	Dhárwár.
Thána.	Bijápur.
City of Bombay.	Kánara.
Kolába.	Surat.
Ahmednagar.	Kaira.
Poona.	Panch Mahále.
Sholápur.	Karáchi.
Sátára.	Hyderabad.
Ratnágiri.	Shikárpur.

6. The Collectorates, in which there was a falling off, as compared with 1886, are as follows :—

	1886.	1887.
Broach	13,175 ...	12,546
Ahmedabad	33,287 ...	31,660
Thar and Párkar ...	7,783 ...	7,670
Upper Sind Frontier ...	3,302 ...	2,976

I have again to invite prominent attention to the extremely defective state of the registration of births in the City of Bombay which has been repeatedly commented upon, and I regret to find that no efficient measures have as yet been made to improve it. From a subsequent table it will be seen that, out of the 56 towns in the Presidency, the City of Bombay occupies the 4th place from the bottom of the list. Government was pleased, last year, to direct the attention of the Municipal Commissioner to this matter; but no improvement has taken place. During the year Dr. Blaney proposed that the registration should be entrusted to the Vaccination Department, and in reply to the Municipal Commissioner I stated I should have no objection to this being done, provided that a sufficient establishment is granted to carry out the work, which, however, properly forms a part of the duties of the Health Officer.

Birth registration in urban and rural districts.

7. The birth-rate per 1,000 of population among the urban and rural population in each Collectorate of the Presidency during 1887 as compared with 1886 is given in the following table:—

Collectorates.	Urban and Rural.	Population.	1886.	1887.
Khándesh	Urban	49,465	22·80	27·62
	Rural	1,187,766	36·78	41·46
Násik	Urban	48,535	21·94	24·39
	Rural	732,671	36·96	41·29
Thána...	Urban	27,366	9·54	10·96
	Rural	780,001	28·71	32·49
City of Bombay	Urban	773,196	18·98	19·61
	Rural	.....	...	...
Kolába	Urban	23,531	22·40	22·40
	Rural	459,299	30·53	32·55
Ahmednagar...	Urban	46,288	35·43	40·29
	Rural	704,940	43·33	50·24
Poona...	Urban	147,376	27·42	28·57
	Rural	753,245	36·01	42·13
Sholápur	Urban	92,926	26·15	25·62
	Rural	489,561	48·14	54·54
Sátára	Urban	51,482	25·97	31·80
	Rural	1,010,868	43·18	46·07
Ratnágiri	Urban	21,563	30·79	33·85
	Rural	975,527	25·03	27·95
Belgaum	Urban	54,190	28·60	33·40
	Rural	809,824	42·32	45·61
Dhárwár	Urban	91,071	36·78	41·60
	Rural	791,836	46·61	48·85
Bijápur	Urban	18,448	23·47	43·26
	Rural	620,045	43·14	52·17
Kánara	Urban	24,390	33·74	31·19
	Rural	397,450	30·61	30·37
Surat	Urban	123,073	32·92	34·82
	Rural	491,125	42·24	44·68
Broach	Urban	48,760	32·69	32·19
	Rural	278,170	41·63	39·46
Kaira	Urban	67,614	30·78	31·25
	Rural	737,186	38·74	39·09
Panch Maháls	Urban	25,736	21·37	21·45
	Rural	229,743	35·72	36·93
Ahmedabad	Urban	171,390	39·42	37·34
	Rural	684,934	38·74	36·88
Karáchi	Urban	68,332	48·89	53·98
	Rural	410,356	22·71	24·98
Hyderabad	Urban	45,195	34·05	40·29
	Rural	709,429	25·97	26·73
Thar and Párkar	Urban	2,828	24·04	22·63
	Rural	200,516	38·47	37·93
Shikárpur	Urban	83,073	25·45	27·54
	Rural	769,913	31·90	33·78
Upper Sind Frontier	Urban	11,352	19·03	20·70
	Rural	112,829	27·35	24·29
Presidency ...	Urban	2,117,180	26·56	27·94
	Rural	14,337,234	36·64	39·69

8. The recorded birth-rates among the urban and rural populations of the Presidency were respectively 27·94 and 39·69 against 26·56 and 36·64 in 1886. Amongst the rural population of each Collectorate, except Ratnágiri, Kánara, Ahmedabad, Karáchi and Hyderabad, the birth-rates were higher than in the urban circles. In 1886 the birth-rates amongst the urban circles were also lower than in the rural circles in these Collectorates.

9. The difference is most marked in the following Collectorates :—

	Ratio per 1,000.	
	Rural.	Urban.
Sholápur	54·54	25·62
Thána	32·49	10·96
Násik	41·29	24·39
Punch Maháls	36·93	21·45
Thar and Párkar	37·93	22·63
Sátára	46·07	31·80
Khándesh	41·46	27·62
Surat	44·68	30·82
Poona	42·13	28·57
Belgaum	45·61	33·40

Whilst in the undermentioned five Collectorates the birth-rates in the rural circles are lower than in the urban :—

	Urban.	Rural.
Karáchi	53·98	24·98
Hyderabad	40·29	26·73
Ratnágiri	33·85	27·95
Kánara	34·19	31·37
Ahmedabad	37·34	36·88

Birth-rates in tálukás.

10. The birth-rate for each táluka (rural registration circle) is shown in a diagram on the opposite page which has been drawn so as to show the birth-rate in each Collectorate at a glance.

11. It will be seen that 33 tálukás record a very high rate of above 50 per 1,000 of population, whilst among 71 rural registration circles it was between 40 and 50 per 1,000. In 42 it closely approached the standard (40 per 1,000), whilst in 29 it was low, and probably inaccurate, being 30 to 35 per 1,000; and in 38 it was decidedly inaccurate, as it ranged between 20 and 30 per 1,000. In nine it was extremely inaccurate, being below 20 per 1,000. These nine tálukás are in Sind, where the registration of births, although an improvement has taken place, is still, as I have previously noticed, defective.

12. In Khándesh—except in the towns, where it is very low—the registration of births is very fairly carried out in all the tálukás, with the exceptions of Pimpalner and its petha Nizámpur, Sháháda and Taloda, in which it is deplorably low.

In Násik it is well attended to in all the tálukás, except Igatpuri, where it is very low.

In Thána the registration of births is neglected in all the tálukás, especially in Sháhápur, Karjat, Dáhánu, Murbád, Máhim, Sálsette and Bassein.

In Kolába it is neglected in all the tálukas, especially in Pen and its petha Nágothna, Mángaon and Mahád.

In Ahmednagar the registration of births is extremely well carried out throughout the Collectorate.

In Poona it is well attended to in all the tálukás except Sirúr in which more attention is required.

In Sholápur it is very well carried out throughout the Collectorate.

In Sátára it is well attended to; but Jávli, Válva and Málcompeth require more supervision.

In Ratnágiri the registration of births is deplorably neglected throughout the Collectorate, and no improvement has taken place since last year.

In Belgaum it is well carried out in all the tálukás, except in Khánápur, where it is low.

In Dhárwár it is well attended to in all the tálukás except Kalghatgi in which it is a little low.

In Bijápur it is satisfactorily carried out in all the tálukás.

In Kánara more attention is required to the registration of births throughout the Collectorate, especially in Siddápur, Bhatkal Petha, Mugud Petha, Sirsi, Yellápur and Haliyál and its petha Supa.

In Surat it is fairly carried out throughout the Collectorate.

In Broach it is also fairly attended to in all the tálukás; but more attention is still required.

In Kaira it is well attended to in all the tálukás except Kapadvanj in which the rate is very low.

In Punch Maháls it is fairly carried out in Godhra, Jhálod and Dohad; but in Kálol and Hálol it requires more attention.

In Ahmedabad it is well carried out in Gogha, Viramgám, Dhandhuka, and Dholka; but requires more attention in Parántij, Daskrohi and Sánand.

In Karáchi it is neglected in all the tálukás.

In Hyderabad, with the exception of Naushahro, Kandiáro, Moro and Sákrand, more attention is required in all the remaining tálukás.

In Thar and Párkar it has received much attention in Mitti, Cháchra, Nagar and Dipla; but in the remaining tálukás it is much neglected.

In Shikárpur it is fairly carried out in Shikárpur, Mehar, Nasirabad, Naushahro, Ghotki and Kakar, but more attention is required in the remaining tálukás.

In Upper Sind Frontier it is much neglected in all the tálukás.

I, therefore, hope that Government will be pleased again, in even yet more stringent terms, to call the especial attention of the Collectors, in the following districts, to the necessity for a more careful examination of the registration of births in their respective Collectorates:—

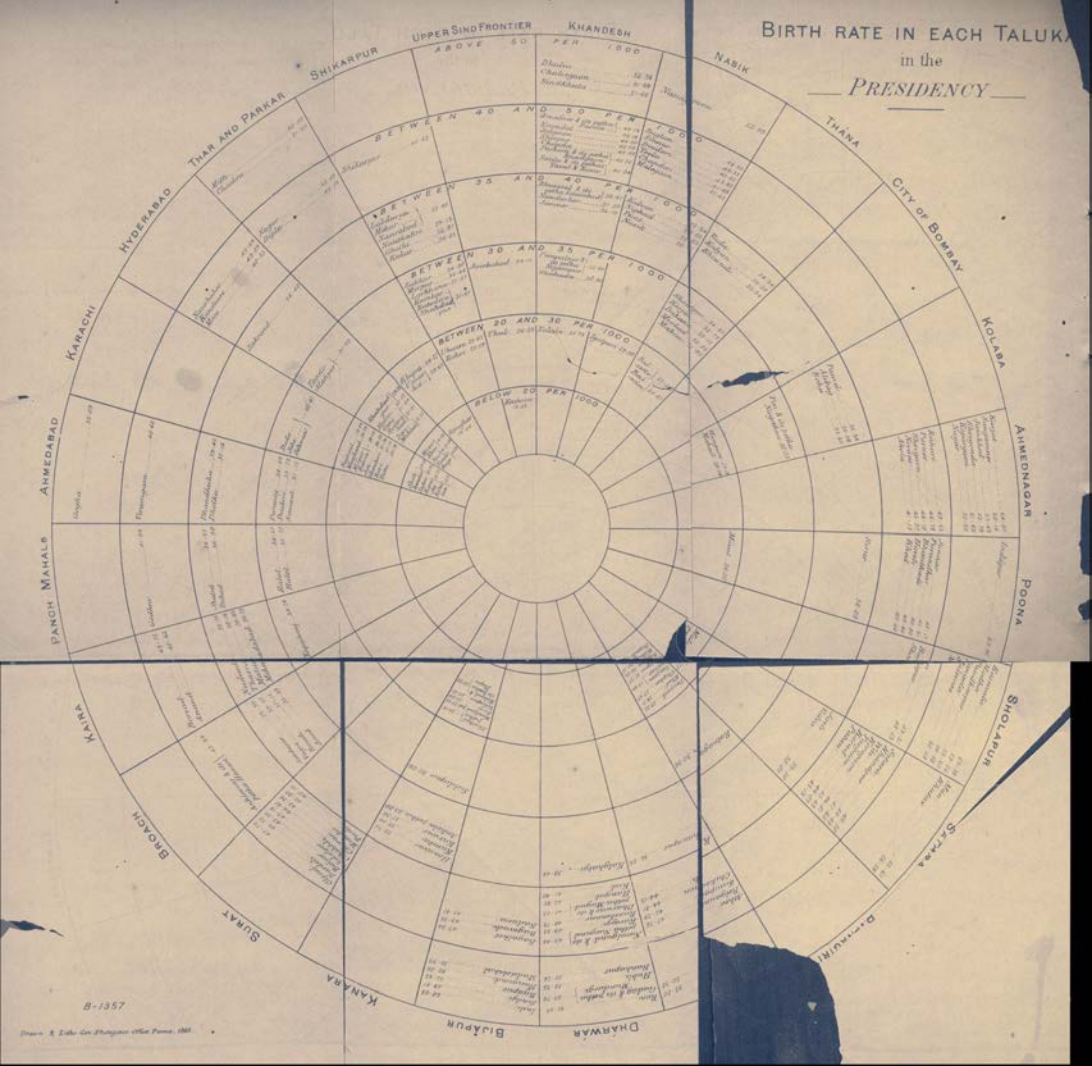
Thána.	Karáchi.
Kolába.	Hyderabad.
Ratnágiri.	Thar and Párkar.
Kánara.	Shikárpur.

Upper Sind Frontier.

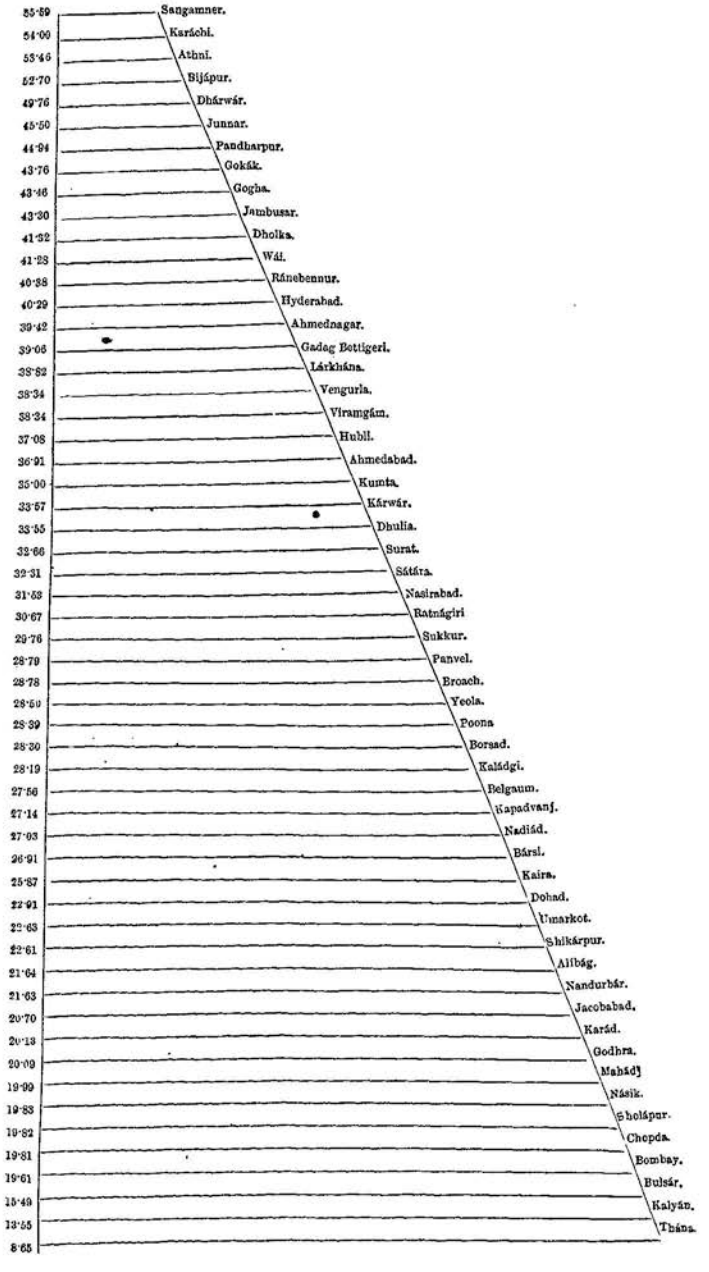
Birth-rate in sequence in towns.

13. The following diagram shows the recorded birth-rate in each town in the Presidency, arranged in sequence of the highest birth-rate per 1,000 of population:—

BIRTH RATE IN EACH TALUKA in the PRESIDENCY



Recorded Birth-rate per 1,000 of Population in Towns.



14. It will be seen that, out of the 56 towns in the Presidency, 14 have returned a birth-rate exceeding 40 per 1,000. The most remarkable improvement over last year is noticed in the town of Bijápur, in which a birth-rate of 52·70 was recorded against 26·26 in 1886. In many towns, however, the registration of

births is still much neglected, and particularly, as noticed last year, in zilla stations, where one would have supposed the wishes of Government would have been more strictly attended to. For example in the town of Thána, a birth-rate of only 8·65 per 1,000 was recorded against 6·09 in 1886, in the town of Sholápur, a birth-rate of 19·82 was registered against 20·86, and in the town of Kairá 25·87 against 30·30 in 1886. In the towns of Poona and Belgaum the recorded birth-rates were respectively 28·39 and 27·56 per 1,000 against 27·44 and 19·86 in 1886. Birth-rates, such as Thána 8·65, Kalyán 13·55, Balsár 15·49, Bombay 19·61, Chopda 19·81 and those returned by Sholápur, Násik, Mahád are absolutely valueless. These and other Municipalities, which have returned similarly inaccurate birth-rates, cannot be performing their duty properly, and I hope Government will be pleased to call the especial attention of the authorities to the necessity for much greater attention being paid to this most important subject. It is most disheartening to call attention to this subject year after year without any efficient steps being taken to improve registration. It seems to me if Government were pleased to inform these backward Municipalities that it is prepared to quarter, at their expense, an establishment necessary to obtain a proper registration, that they would soon recognize the importance of the subject. The undermentioned Municipalities deserve credit for the attention they have paid to the registration of births :—

Collectorates.	Municipalities.	Birth-rate.
Ahmednagar	Sangamner	55·59
Karáchi	Karáchi	54·00
Belgam	Athni	53·46
Bijápur	Bijápur	52·70
Dhárwár	Dhárwár	49·76
Poona	Junnar	45·50
Sholápur	Pundharpur	44·94
Belgaum	Gokák	43·76
Ahmedabad	Gogha	43·46
Broach	Jambusar	43·30
Ahmedabad	Dholka	41·32
Sátára	Wái	41·28
Dhárwár	Ranebennur	40·38
Hyderabad	Hyderabad...	40·29

15. The above tables confirm the view that a high birth-rate is not confined to any particular part of the Presidency. And I think it may be taken as a fair indication that the people are at length beginning to record more correctly the births that occur in their families. This result is also, in a great measure, in my opinion, due to the interest displayed by district officers, and bears testimony to a rigid examination having been made of birth registers by them, as well as by the officers of the Sanitary Department, who, since the compilation of vital statistics was entrusted to them, have effected a great improvment in this respect. I do not believe, as suggested in the Government Resolution on the last annual report, that the enervating climate of the Konkan has anything whatever to do with the lessened birth-rate recorded there, for, if it had, we should find a higher death-rate, whereas the death-rate as well as the birth-rate confirms my belief that the registration of vital statistics is utterly neglected in these districts.

16. I am more than ever convinced that, in taking 40 per 1,000 to represent the normal birth-rate, we have formed too low a standard, and I still believe that 45 per 1,000 will be found to be a nearer approximation to the truth ; but it is evident much greater attention to registration is required in very many Collectorates.

Birth-rates in Cantonments.

17. The following table contrasts the recorded birth-rate in each Cantonment in British territory in 1887 with the results of the previous year :—

Cantonments.	Birth-rate, 1886.	Birth-rate, 1887.
Devláli...	20·26	51·57
Málegaon	38·29	39·15
Ahmednagar	18·09	17·21
Poona	28·95	30·23
Kirkee...	37·92	42·98
Belgaum	16·07	12·94
Ahmedabad	35·05	13·92

It will be seen from the above table that the recorded birth-rate is below the standard (40 per 1,000) in each of the Cantonments except Devláli and Kirkee. Much greater attention appears to have been paid to the registration of births in the Cantonment of Devláli, as the recorded birth-rate in it is more than double than that registered in 1886. In the Cantonments of Ahmednagar, Belgaum and Ahmedabad the registration of births is much neglected, and I hope that Government will be pleased to call the especial attention of the Magistrates in these Cantonments to the necessity for a more careful examination of birth registers in their respective Cantonments.

Still-born.

18. During the year 1887, 4,404 boys and 3,462 girls, or a total of 7,866 children, against 4,629 boys and 3,808 girls, or a total of 8,437 in 1886, were registered as still-born. These births occurred in the following Collectorates:—

Collectorates.	Recorded Births.	Still-born.			Percentage of Still-born to born alive.
		Urban.	Rural.	Total.	
Khándesh	50,607	10	304	314	·62
Násik	31,433	39	245	284	·90
Thána	25,643	1	116	117	·46
City of Bombay	15,166	1,193	...	1,193	7·87
Kolába	15,523	9	172	181	1·16
Ahmednagar	37,279	21	56	77	·21
Poona	35,941	91	248	339	·95
Sholápur	29,081	3	44	47	·02
Sátára	48,204	64	254	318	·66
Ratnágiri	27,998	8	187	195	·07
Belgaum	38,743	50	362	412	1·06
Dhárwár	42,473	108	670	778	1·83
Bijápur	33,147	3	441	444	1·34
Kánara	13,372	47	625	672	5·03
Surat	25,737	228	277	505	1·96
Broach	12,546	53	110	163	1·30
Kaira	30,930	39	214	253	·81
Panch Mahále	9,044	1	65	66	·73
Ahmedabad	31,660	373	57	430	1·36
Karáchi	13,940	113	165	278	1·99
Hyderabad	20,788	70	145	215	1·03
Thar and Párkar	7,670	3	78	81	1·06
Shikárpur	28,292	141	340	481	1·70
Upper Sind Frontier	2,976	3	20	23	·77
Presidency ...	628,193	2,671	5,195	7,866	1·25

19. A high percentage of still-born to born alive is again noticed in the city of Bombay (7·87 against 7·81 in 1886) and in Kánara (5·03 against 5·44).

DEATHS.

Number of deaths.

20. In 1887, among the civil population in the 285 rural, town and cantonment circles in the Presidency of Bombay, the deaths of 238,358 males and 216,903 females, or a total of 455,261 persons, were recorded. In the previous year 381,185 deaths, or 74,076 less than in 1887, were registered. The following statement shows the number of deaths recorded in each year since 1877 :—

1877	627,708	1882	343,418
1878	532,951	1883	420,198
1879	387,542	1884	408,409
1880	328,673	1885	473,591
1881	381,450	1886	381,185
1887	455,261		

so that, as compared with the previous year, 1887 was an unhealthy year.

Death-rate.

21. The computed death-rate per 1,000 of population in 1887 was 27·67 against 23·17 in 1886 and a decennial mean of 26·20. Omitting Sind, where the mortuary registration is still extremely defective, the recorded death-rate in the other parts of the Presidency amounted to 29·62 per 1,000 of population.

Male and female death-rates.

22. The millesimal ratio of males dying to males living was 28·05 and of females dying to females living 27·26. In 1886 these ratios were, respectively, 23·55 and 22·75. For every 100 females who died 109·89 deaths among males were registered, but these proportions vary considerably in the following Collectorates:—

In Ahmednagar the ratio of male to female deaths was			113·23	per cent.
„ Kánara	„	„	114·06	„
„ Broach	„	„	113·73	„
„ Kaira	„	„	117·56	„
„ Ahmedabad	„	„	114·31	„

As usual, the greatest discrepancy is to be found in Sind.

In Karáchi Collectorate	120·92	male deaths were recorded for every 100 female deaths.		
„ Hyderabad	122·30	„	„	„
„ Thar and Párkar	126·10	„	„	„
„ Shikárpur	127·31	„	„	„
„ Upper Sind Frontier	136·82	„	„	„

Deaths by Districts.

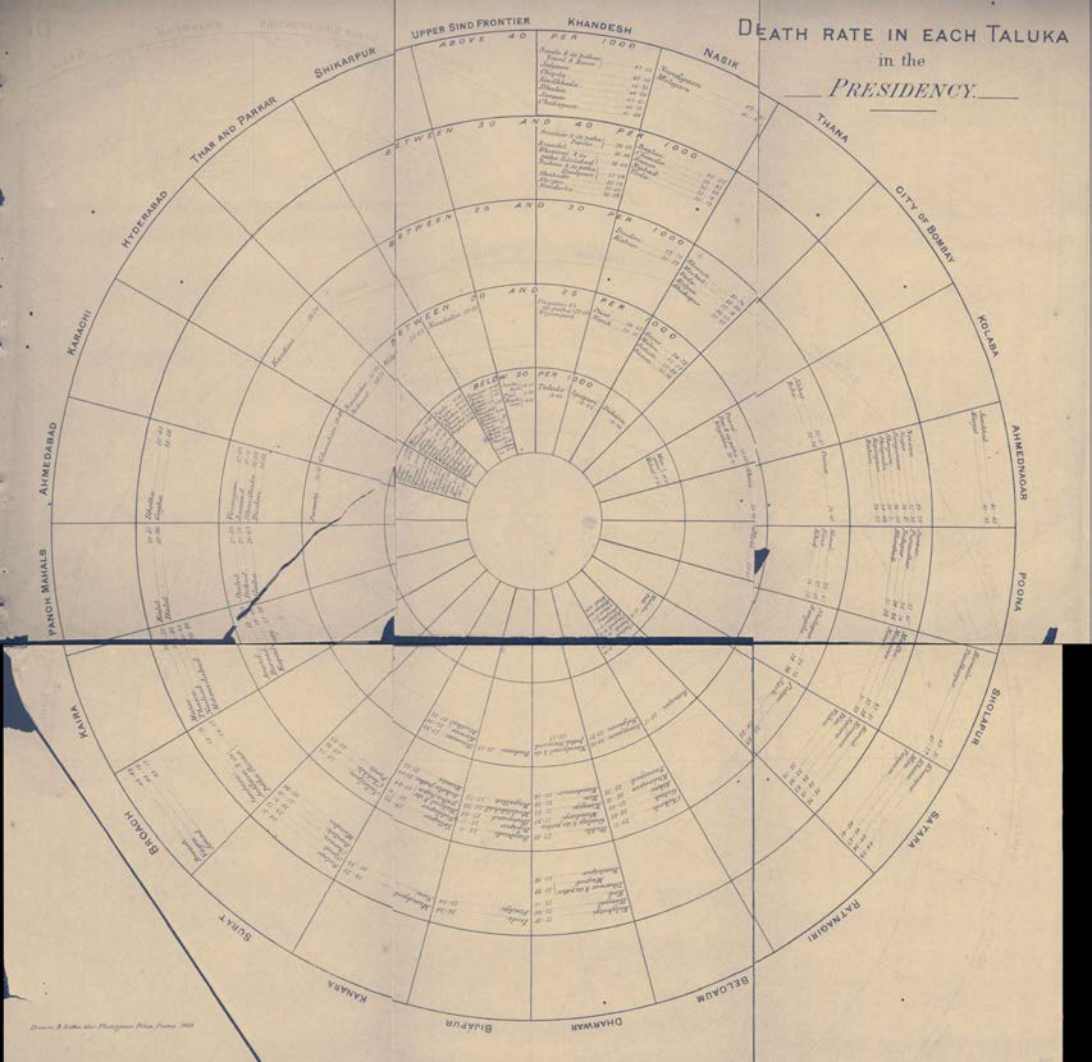
23. The following table shows, for each registration district, the population enumerated at the census of 1881, the number of deaths recorded in 1887 by sexes, and their ratios per 1000 of population. The highest ratio was reported in the Eastern Gujarát Registration District and the lowest in Sind :—

Districts.	Population according to Census of 1881.			Number of Deaths.			Ratio per 1,000 of Population.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
Western Registration District ...	2,154,823	1,927,007	4,081,830	63,511	58,074	121,585	29·47	30·14	29·78
Central do.	2,137,095	2,156,681	4,293,776	66,399	61,589	127,988	31·07	28·56	29·81
Southern do.	1,417,136	1,390,118	2,807,254	39,609	37,698	77,307	27·95	27·12	27·54
Eastern Gujarát Registration District	1,471,834	1,385,897	2,857,731	47,919	42,035	89,954	31·94	30·33	31·16
Sind Registration District	1,316,830	1,096,993	2,413,823	21,820	17,507	39,327	16·57	15·96	16·71
Presidency ...	8,497,718	7,956,696	16,454,414	238,358	216,903	455,261	28·05	27·26	27·67

Deaths by Collectorates.

24. The next table shows the recorded deaths in each Collectorate in 1887 as compared with 1886 and the mean of the previous 10 years :—

DEATH RATE IN EACH TALUKA in the PRESIDENCY.



Districts.	Number.	Collectorates.	Population according to Census of 1881.	Mean for 10 Years, 1877—1886. Number of Deaths.	Mean for 10 Years, 1877—1886. Ratio per 1,000 of Population.	1886. Number of Deaths.	1886. Ratio per 1,000 of Population.	1887. Number of Deaths.	1887. Ratio per 1,000 of Population.
Western Registration District.	1	Khándesh	1,237,231	30,995	26·86	35,028	28·31	47,172	38·13
	2	Násik	781,206	21,365	28·37	17,674	22·62	24,389	31·22
	3	Thána	807,367	18,175	22·07	16,875	20·90	19,398	23·91
	4	City of Bombay	773,196	23,178	32·12	19,812	25·62	20,252	26·19
	5	Kolába	482,830	10,013	23·29	9,776	20·24	10,464	21·67
	6	Ahmednagar	751,228	21,918	28·83	19,991	26·61	26,264	34·96
Central Registration District.	7	Poona	900,621	21,993	24·35	19,855	22·04	27,138	30·13
	8	Sholápur	582,487	18,666	29·32	14,191	24·36	20,281	34·82
	9	Sátára	1,062,550	29,876	28·14	27,238	25·44	37,971	35·74
	10	Ratnágiri	967,000	17,826	17·72	15,803	15·85	16,334	16·38
Southern Registration District.	11	Belgaum	864,014	29,965	33·52	20,031	23·19	23,181	26·83
	12	Dhárwár	882,907	31,517	34·07	24,509	27·75	24,835	28·12
	13	Bijápur	638,493	22,465	31·66	12,150	19·02	17,937	28·09
	14	Kánara	421,840	13,598	32·97	12,122	28·73	11,354	26·91
	15	Surat	614,198	16,998	27·80	16,196	26·35	18,410	30·13
Eastern Gujarát Registration District.	16	Broach	326,930	10,861	32·30	9,715	29·71	12,914	39·50
	17	Kaira	804,800	23,415	29·42	20,193	25·09	25,274	31·40
	18	Panch Mahále	255,479	5,782	23·17	5,481	21·45	7,348	28·76
	19	Ahmedabad	856,324	24,991	29·55	22,082	25·79	25,008	29·20
Sind Registration District.	20	Karáchi	478,688	8,271	18·11	8,761	18·17	8,278	17·29
	21	Hyderabad	754,624	10,915	14·72	14,599	19·34	11,971	15·86
	22	Thar and Párkar	203,344	3,076	15·83	3,269	16·04	3,387	16·65
	23	Shikárpur	852,986	11,496	13·98	14,361	16·84	14,218	16·67
	24	Upper Sind Frontier	124,181	1,158	10·48	1,542	12·43	1,473	11·86

ABSTRACT.

Western Registration District	4,081,830	103,725	26·72	99,165	24·29	121,585	29·78	
Central do.	4,293,776	110,279	25·25	97,078	22·61	127,988	29·81	
Southern do.	2,807,254	97,546	33·17	68,812	24·51	77,307	27·54	
Eastern Gujarát do.	2,857,731	82,047	28·90	73,657	25·77	89,054	31·16	
Sind do.	2,413,823	34,916	15·02	44,473	17·60	39,327	16·71	
Presidency ..	16,454,414	428,513	26·20	381,185	23·17	455,261	27·67	

In 1887 the recorded death-rate per 1,000 of population was higher than in 1886 in each of the Collectorates, except Kánara, Karáchi, Hyderabad, Shikárpur and Upper Sind Frontier. In the City of Bombay, Ratnágiri and Dhárwár the recorded death-rates are slightly in excess of those for 1886. In the city of Bombay it was 26·19 per 1,000 of population against 25·62 in 1886, in Ratnágiri 16·38 against 15·85 and in Dhárwár 28·12 against 27·25. In the Collectorates of Thar and Párkar and Shikárpur, the recorded death-rates (16·66 and 16·47 per 1,000) are nearly the same as in 1886 (16·04 and 16·84 respectively).

It was also higher than the annual mean of the preceding 10 years in 15 of the 24 Collectorates. The exception being

Bombay.	Dharwár.
Kolába.	Bijápur.
Ratnágiri.	Kánara.
Belgaum.	Ahmedabad.

Karáchi.

In Ahmedabád the death-rate (29·20) in 1887 was slightly lower than the mean (29·55).

Death-rate by Collectorates in sequence.

25. The next statement shows the deaths in 1887 by Collectorates in sequence of highest rates, which range from 39·50 per 1,000 in Broach to 11·86 in Upper Sind Frontier. In 1886 the maximum and minimum ratios (29·71 and 12·43 per 1,000, respectively) were in these Collectorates :—

Collectorates.	Number of Deaths. Males.	Number of Deaths. Females.	Number of Deaths. Total.	Ratio per 1,000 of Population. Males.	Ratio per 1,000 of Population. Females.	Ratio per 1,000 of Population. Total.
Broach	6,872	6,042	12,914	40·78	38·13	39·50
Khándesh	24,682	22,490	47,172	39·02	37·19	38·13
Sátára	19,366	18,605	37,971	36·37	35·12	35·74
Ahmednágar	13,947	12,317	26,264	36·55	33·32	34·96
Sholápur	10,512	9,769	20,281	35·66	33·96	34·82
Kaira	13,657	11,617	25,274	32·00	30·73	31·40

Collectorates.	Number of Deaths.			Ratio per 1,000 of Population.		
	Males.	Females.	Total.	Males.	Females.	Total.
Násik	12,827	11,562	24,389	32·28	30·12	31·22
Poona	14,142	12,996	27,138	31·07	29·17	30·13
Surat	9,390	9,120	18,510	30·68	29·52	30·13
Ahmedabad...	13,339	11,669	25,008	30·35	27·98	29·20
Panch Maháls	3,761	3,587	7,348	28·67	28·85	28·76
Dhárwár	12,592	12,243	24,835	26·15	27·76	28·12
Bijápur	9,017	8,920	17,937	28·39	27·79	28·09
Kánara	6,050	5,304	11,354	23·78	26·68	26·91
Belgaum	11,950	11,231	23,181	27·50	26·15	26·83
City of Bombay	10,600	9,652	20,252	22·81	31·29	26·19
Thána	9,989	9,319	19,308	23·99	23·82	23·91
Kolába	5,413	5,051	10,464	22·18	21·15	21·67
Karáchi	4,531	3,747	8,278	17·35	17·62	17·29
Shikárpur	7,963	6,255	14,218	17·27	15·96	16·67
Thar and Párkar	1,889	1,498	3,387	16·81	16·47	16·66
Ratnágiri	8,432	7,902	16,334	17·82	15·08	16·38
Hyderabad	6,586	5,385	11,971	16·17	15·50	15·86
Upper Sind Frontier ...	851	622	1,473	12·13	11·52	11·86
Presidency ..	238,358	216,903	455,261	28·05	27·26	27·67

Deaths by sexes.

26. This statement also shows that, in Dhárwar, the City of Bombay and Kánara, the recorded death-rate for females is higher than that among males. In Panch Maháls, Thána, Karáchi and Thar and Párkar the death-rates of males and females were equal. In the remaining Collectorates the death-rate for males everywhere exceeds that for females. In 1886 the female death-rate exceeded that among males in the City of Bombay, Kaira and Panch Maháls.

Birth and death-rates compared by Collectorates.

27. In the city of Bombay the recorded birth-rate was much below the registered death-rate (19·61 and 26·19 per 1,000 respectively). The difference can only be ascribed to defective registration. In the Collectorate of Broach the recorded birth-rate (38·37 per 1,000) in 1887 was slightly higher than the recorded death-rate (39·50). In all other Collectorates the recorded birth-rates are considerably higher than the registered death-rates. This is especially noticed in the following Collectorates :—

Collectorate.	Birth-rate.	Death-rate.
Bijápur	51·91	28·09
Thar and Párkar	37·72	16·66
Dhárwár	48·10	28·12
Belgaum	44·84	26·83
Shikárpur	33·17	16·67
Sholápur	49·93	34·82
Ahmednagar	49·62	34·96

In most of the above Collectorates the registration of births has been very creditably performed; but the death-rates recorded in Thar and Párkar and Shikárpur are manifestly incorrect.

Deaths by ages.

28. The figures given below show the total deaths in 1886, under different ages as also the ratio per 1,000 living calculated on the population of each age period enumerated at the census of 1881, and the percentage on total deaths :—

Age periods.	Population according to Census of 1881.	Deaths.	Ratio per 1,000 of Population.	Percentage on Total Deaths.
Under 1 year	457,644	99,637	217·72	21·88
1 and under 5 years	1,714,283	102,519	59·80	22·52
5 „ 10 „	2,387,644	24,494	10·26	5·38
10 „ 15 „	1,877,474	12,075	6·43	2·65
15 „ 20 „	1,287,360	13,292	10·33	2·92
20 „ 30 „	2,984,550	38,500	12·90	8·46
30 „ 40 „	2,459,456	38,376	15·60	8·43
40 „ 50 „	1,543,353	34,480	22·34	7·57
50 „ 60 „	1,000,059	35,458	35·45	7·79
60 years and upwards	742,591	56,430	75·99	12·40
Total ...	16,454,414	455,261	27·67	100·

The mortality amongst infants under 1 year and children above 1 year but under 5, is, as usual, terribly high, in comparison with other periods of life. In fact, the deaths among children under 5 years of age formed 44·40 per cent. of the total deaths. As repeatedly pointed out, the extremely high rate of mortality among children of tender years affords unmistakable proof of local causes of insanitation throughout the Presidency. The period of greatest immunity was in the age of above 10 and under 15, the rate being 6·43 per 1,000. For those "above 60 and upwards" the mortality was at the rate of 75·99 per 1000. The percentage on total deaths amongst infants under 1 year is 21·88 against 24·20 in 1886. For those above 1 and under 5 the percentage on total deaths is 22·52 against 20·47 in 1886. For old people 60 and upwards the percentage on total deaths is 12·40 against 12·59 in 1886. The total deaths by sexes under the different ages in 1887 in each Collectorate are given in Annual Form IV. in the Appendix.

Deaths by caste or class.

29. The deaths by caste in each Collectorate are given in Annual Form No. V. in the Appendix. According to the census of 1881, the Mahomedan population numbered 3,107,171 persons, amongst whom, in 1887, 62,176 deaths were recorded against 58,625 in 1886, the death-rate per 1,000 being 20·01 against 18·87 in 1886. The Hindu population amounted to 13,128,587 persons, amongst whom 387,655 deaths or 29·53 per 1,000 of population were reported during 1887. In 1886 the total deaths amongst this race was 3,16,076, equal to a death-rate of 24·08 per 1,000. Amongst the Christian population numbering 1,38,326 persons 2,307 deaths were reported during the year against 2,301 in 1886, the death-rate being 16·68 against 16·63 per 1,000 in 1886. Under the heading "Other Castes" are included all those not belonging to either of the above sects, who, by the census of 1881 numbered 80,330 persons, amongst whom during 1887 there were 3,125 deaths against 4,183 in 1886, the death-rate being 38·88 per 1,000 against 52·07 in 1886. For Mahomedans the maximum rate (38·12 per 1,000) took place during the year in the Collectorate of Broach, and the minimum (10·80) in Thar and Párkar. In 1886 these results were 30·43 and 11·10 and they were reported as having occurred in the city of Bombay and Thar and Párkar. Amongst Hindus the maximum rate (40·03 per 1,000) in 1887 was in the Broach Collectorate and the minimum (16·28) in Ratnágiri. In 1886 they occurred in the same Collectorates—Broach (30·19) and Ratnágiri (15·77). The maximum death-rate, during the year, amongst Christians was 28·70 and was reported from the Kaira Collectorate, and the minimum (4·71) from Karáchi. In the Collectorates of Panch Maháls, Thar and Párkar and Upper Sind Frontier no deaths amongst Christians were reported in 1887.

Deaths by causes.

30. The subjoined table shows the deaths, in 1887, arranged according to the specified causes laid down by the Government of India, and contrasted with the results for 1886 and

the mean of the preceding 10 years. The causes of death will be briefly noticed in the next section :—

Causes of deaths.	Mean for 10 years 1877—1886.		1886.		1887.	
	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.	Number.	Ratio per 1,000 of Population.
Cholera	22,543	1·38	167	0·01	25,711	1·56
Small-pox...	6,747	0·41	876	0·05	3,753	0·23
Fevers	288,280	17·63	281,450	17·10	308,722	18·76
Bowel-complaints ...	36,385	2·22	36,612	2·23	42,634	2·59
Injuries	6,296	0·39	5,692	0·35	5,558	0·34
Other causes	68,262	4·17	56,388	3·43	68,883	4·19
All causes ...	428,513	26·20	381,185	23·17	455,261	27·67

Deaths by months.

31. The monthly distribution of deaths in 1887 is shown in the following table, contrasted with the deaths in 1886 and the mean for 10 years. During 1887 the greatest number of deaths (46,690) took place in August, as usual, and the least (30,239) in February. In 1886 the greatest number (35,973) was in August and the least (27,460) in June :—

Months.	Deaths from all Causes.					
	Mean for 10 years, 1877—1886.	Ratio per 1,000 of Population.	1886.	Ratio per 1,000 of Population.	1887.	Ratio per 1,000 of Population.
January	33,967	2·08	33,788	2·05	33,013	2·01
February	29,907	1·83	29,325	1·78	30,239	1·84
March	32,401	1·98	29,858	1·81	32,165	1·95
April	32,008	1·96	30,548	1·86	33,411	2·03
May	33,495	2·05	29,810	1·81	35,051	2·13
June	33,700	2·06	27,460	1·67	39,695	2·42
July	38,668	2·36	31,511	1·91	43,614	2·65
August	42,501	2·60	35,973	2·19	46,690	2·84
September	39,102	2·39	33,910	2·06	43,420	2·64
October	37,972	2·32	31,853	1·94	40,543	2·46
November	38,581	2·36	32,586	1·98	39,370	2·39
December	36,211	2·21	34,563	2·11	38,050	2·31
Year ...	428,513	26·20	381,185	23·17	455,261	27·67

Number of Circles.

32. The statistical returns are received from 222 rural and 56 town circles, from 7 cantonments in British and 9 in foreign territory. The aggregate population by the census of 1881 of the rural circles is 14,337,234, of the town circles 2,056,025 and of the cantonments in British territory 61,155, including Europeans, Eurasians and fighting men, or a total of 16,454,414.

Death-rate in urban and rural districts.

33. The death-rate per 1,000 of population among the urban and rural population in each Collectorate of the Presidency during the year 1887 as compared with 1886 is given in the following table :—

Collectorate.	Urban and Rural.	Population.	1886.	1887.
Khándesh	Urban	49,465	18·40	25·63
	Rural	1,187,766	28·72	38·65
Násik	Urban	48,535	25·69	32·98
	Rural	732,671	22·42	31·10
Thána	Urban	27,366	13·19	13·52
	Rural	780,001	21·17	24·28
City of Bombay	Urban	773,196	25·62	26·19
	Rural	.....	...	...
Kolába	Urban	23,531	16·74	18·10
	Rural	459,299	20·42	21·86
Ahmednagar	Urban	46,288	31·43	35·13
	Rural	704,940	26·29	34·95
Poona	Urban	147,376	24·96	29·12
	Rural	753,245	21·47	30·33
Sholápur	Urban	92,926	30·56	37·33
	Rural	489,561	23·19	34·34
Sátára	Urban	51,482	24·90	30·75
	Rural	1,010,868	25·67	36·00
Ratnágiri	Urban	21,563	20 77	24·53
	Rural	975,527	15·74	16·20
Belgaum	Urban	54,190	20·34	24·04
	Rural	809,824	23·37	27·02
Dhárwár	Urban	91,071	22·40	21·07
	Rural	791,836	28·38	28·94
Bijápur	Urban	18,448	12·03	26·94
	Rural	620,045	19·24	28·60
Kánara	Urban	24,390	22·02	23·62
	Rural	397,450	26·15	27·12
Surat	Urban	123,073	24·00	27·74
	Rural	491,125	26·94	30·73
Broach	Urban	48,760	26·60	35·19
	Rural	278,170	30·28	46·26
Kaira	Urban	67,614	26·61	32·85
	Rural	737,186	24·95	31·27
Panch Maháls	Urban	25,736	20·75	24·52
	Rural	229,743	21·53	29·23
Ahmedabad	Urban	171,390	35·18	36·91
	Rural	684,934	23·49	27·28
Karáchi	Urban	68,332	28·73	29·66
	Rural	410,356	16·42	15·23
Hyderabad	Urban	45,195	31·48	21·64
	Rural	709,429	18·57	15·50
Thar and Párkar	Urban	2,828	22·63	20·86
	Rural	200,516	15·98	16·60
Shikárpur	Urban	83,073	19·43	21·28
	Rural	769,913	16·49	16·17
Upper Sind Frontier	Urban	11,352	24·05	19·03
	Rural	112,829	11·36	11·14
Presidency ...	Urban	2,117,180	25·80	18·33
	Rural	14,337,234	22·79	29 05

34. The recorded death-rates among the urban and rural population of the Presidency were respectively 18·33 and 29·05 against 25·80 and 22·79 in 1886. Among the rural population the death-rates were higher than in the urban circles in the following Collectorates:—

Khándesh.	Dhárwár.
Thána.	Bijápur.
Kolába.	Kánara.
Poona.	Surat.
Sátára.	Broach.
Belgaum.	Panch Maháls.

35. The difference is most marked in the Collectorates of Khándesh and Thána, the death-rates being respectively 38·65 and 24·28 in rural and 25·63 and

13·52 in urban circles; whilst in the undermentioned 11 Collectorates the death-rates in the rural circles are lower than in the urban :—

Collectorates.	Urban.	Rural.
Násik	32·98	31·10
Ahmednagar	35·13	34·95
Sholápur	37·33	34·34
Ratnágiri	24·53	16·20
Kaira	32·85	31·27
Ahmedabad	36·91	27·28
Karáchi	29·66	15·23
Hyderabad	21·64	15·50
Thar and Párkar	20·86	16·60
Shikárpur	21·28	16·17
Upper Sind Frontier	19·03	11·14

Death-rates in Rural Circles.

36. The death-rate for each táluka (rural registration circle) in the Presidency and in Sind is shown in the diagram on the opposite page, and it will be seen that 22 tálukás record a high death-rate of above 40 per 1,000. Among 60 rural circles the death-rate was between 30 and 40 per 1,000 and in 53 tálukás between 25 and 30, whilst 28 return death-rates between 20 and 25, and in 59 the death-rate recorded was below 20 persons.

37. In Khándesh the registration of deaths is very fairly carried out, but more attention is required to the subject in the tálukás of Pimpalner and its pethá Nizámpur and Taloda.

In Násik the registration of deaths is well carried out with the exception of Peint, Násik and Igatpuri Tálukás.

In Thána the registration of deaths is well attended to with the exception of Karjat, Máhím, Sálsette, Bassein and Dáhánu Tálukás.

In the Kolába Collectorate the registration of deaths is neglected throughout the Collectorate except in the tálukás of Alíbág and Roha.

In Ahmednagar the registration of deaths appears to be carefully attended to, but more attention is required in the tálukás of Párner and Akola.

In the Poona Collectorate, with the exception of Mával and Khed Tálukás, the registration of deaths is fairly attended to.

In Sholápur the registration of deaths is well attended to throughout the Collectorate.

In Sátára, with the exception of Málcolmpeth Táluka, the registration is carefully attended to.

In Ratnágiri the registration of deaths is deplorably neglected throughout the Collectorate.

In Belgaum, except Sampgaon and Belgaum Tálukás, the registration of deaths is fairly attended to.

In Dhárwár the mortuary registration is carefully attended to throughout the Collectorate, but more attention is required in the táluka of Navalgund and its petha Nargund.

In Bijápur, except in Bádámi Táluka, the registration of deaths is carefully carried out.

In Kánara the registration of deaths is well carried out, except in the tálukás of Honávar, Kárwár and Bhatkal.

In the Surat Collectorate the registration of deaths is very well carried out throughout the Collectorate.

In Broach the registration of deaths is well attended to.

In Kaira the registration of deaths is also well attended to.

In Panch Maháls the registration of deaths is carefully carried out.

In the Ahmedabad Collectorate, with the exception of Parántíj Táluka, the registration of deaths is well attended to throughout the Collectorate.

In the Karáchi Collectorate the registration of deaths is in a deplorable state with the exception of Kandiáro.

In the Hyderabad Collectorate the registration of deaths is much neglected.

In the Thar and Párkar, Shikárpur and Upper Sind Frontier Collectorates the registration of deaths is utterly untrustworthy.

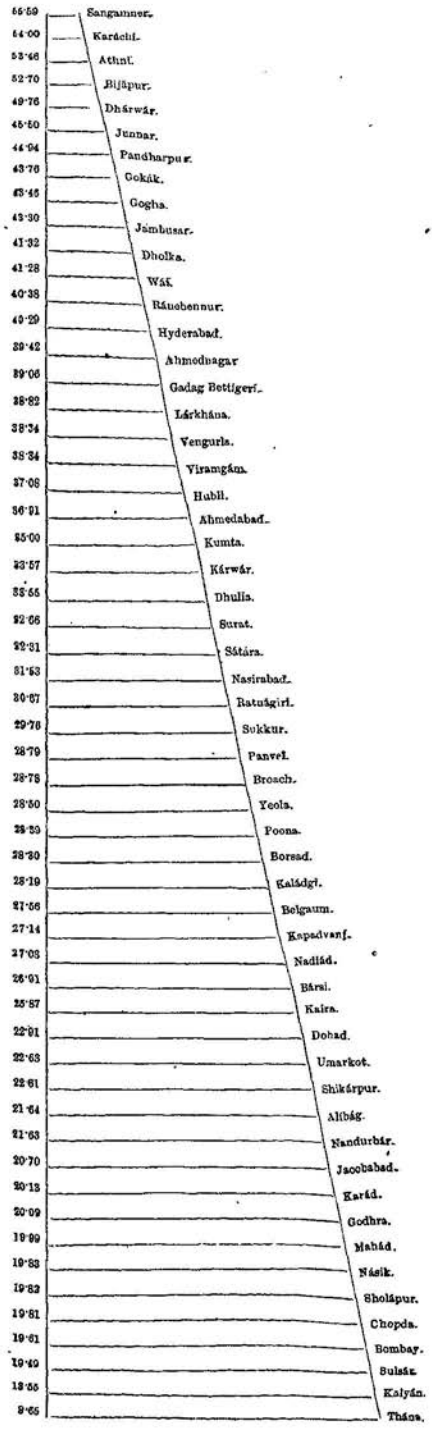
I therefore hope that Government will be pleased to call the especial attention of the Collectors in the following districts to the necessity of making renewed and more effective efforts to improve the registration of deaths in their respective Collectorates.

Násik.	Karáchi.
Thána.	Hyderabad.
Kolába.	Thar and Párkar.
Ratnágiri.	Shikárpur.
Kánara.	Upper Sind Frontier.

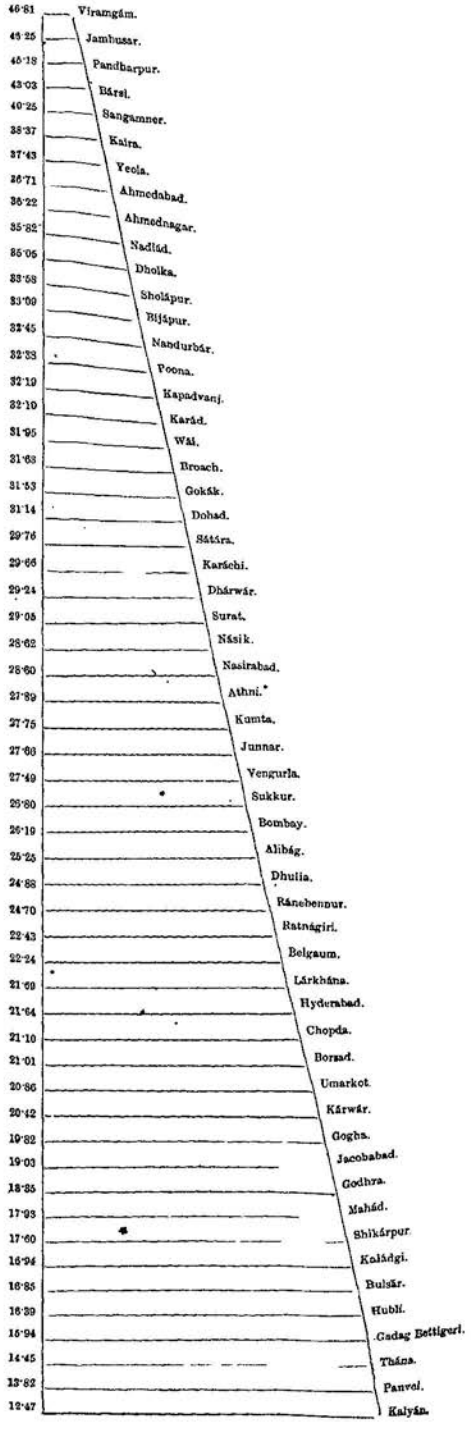
Birth and death-rates in sequence in towns.

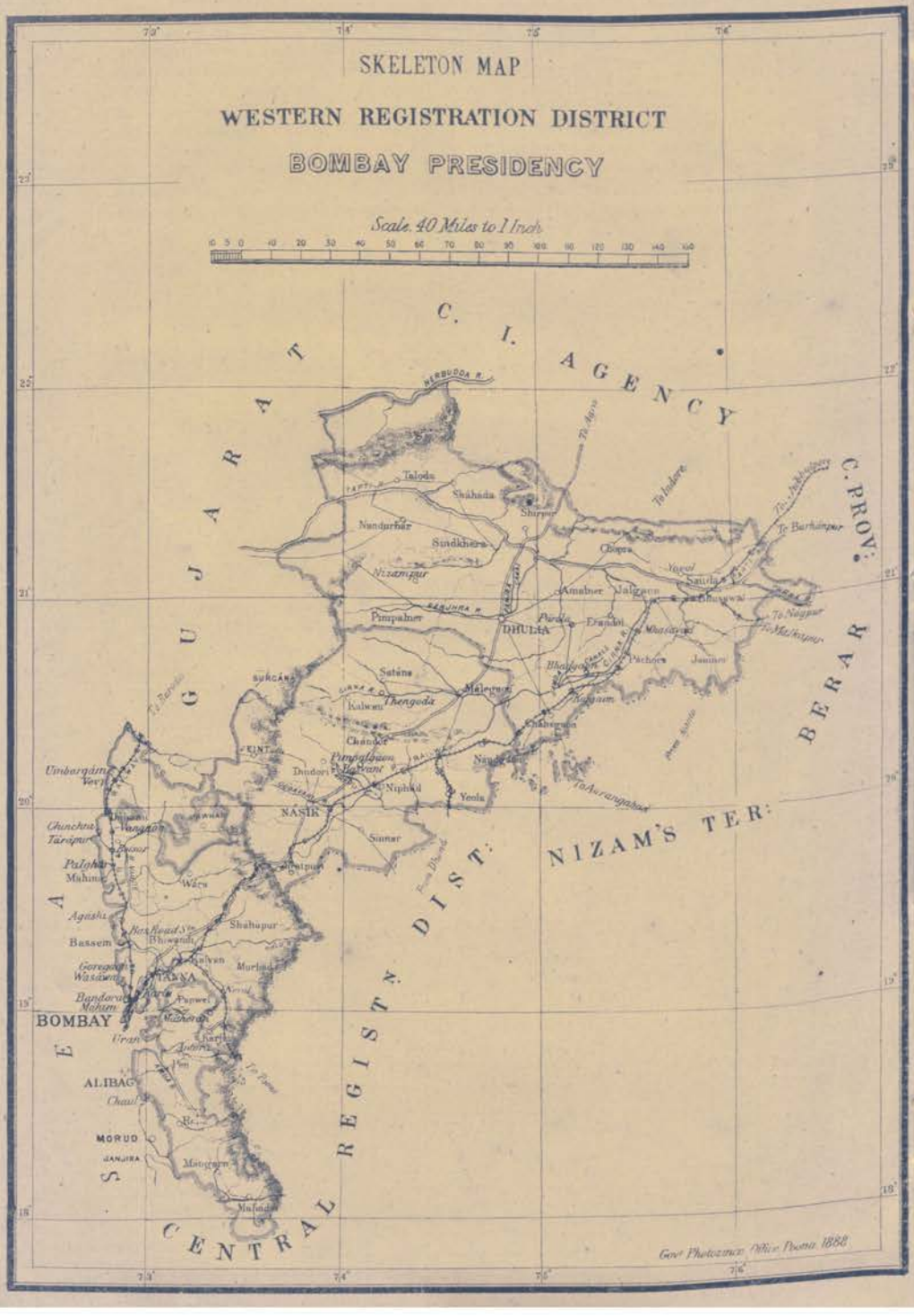
38. It may be useful to show, side by side, the birth and death-rates in sequence in the town circles of this Presidency in order to invite the especial attention of Government to the high death-rate that has taken place in some of them, and the miserably low birth-rate which has been recorded in others.

Birth-rate per 1,000.



Death-rate per 1,000.




SKELETON MAP
WESTERN REGISTRATION DISTRICT
BOMBAY PRESIDENCY
Scale. 40 Miles to 1 Inch
C. I. AGENCY
GUJARAT
C. PROV:
BERAR
NIZAM'S TER:
CENTRAL REGISTN. DIST:
SEA
NERBUDDA R.
Taloda
Shahada
Shirpur
Nandurbar
Sindkhera
Nizampur
Chopra
Yaval
Sauda
Amalner
Jalgaon
Pimpalner
DHULIA
Pachora
Satana
Malegaon
Kalwan
Thengoda
Chandor
Pimpalgaon
Dindori
Niphad
Yeola
NASIK
Sinnar
Umbargam
Vevi
Chinchna
Tarapur
Palghar
Mahim
Wara
Agashi
Bassem
Shahapur
Bhiwandi
Kalyan
Murbad
Goregaon
Wasawa
TANNA
Bandora
Mahim
Panwel
BOMBAY
Uran
Karla
ALIBAG
Chaul
MORUD
JANJIRA
Mangaon
Mahadev
To Indore
To Agra
To Burhanpur
To Nagpur
To Malkapur
To Aurangabad
To Pune
Govt Photozinco Office Poona 1888

39. I have continued the tables (which I commenced in my Annual Report for 1883), showing the number of births and deaths by causes, and their ratios per 1,000 of population in each táluka and town in each Collectorate, and comparing the zilla-rate with the results of the preceding year and the mean of the previous 10 years, as they are extremely valuable in localizing disease to the smallest unit possible under our present system of registration; but as time goes on, and as the registration becomes more perfect, it will, as I suggested last year, be desirable to sub-divide the tálukas into still smaller units, and to show the villages by groups of population. It would, as I pointed out, be possible to have at least 3 such groups, *viz.* :—

Births and deaths by causes and their ratios per 1,000 of population in each táluka and town in each Collectorate.

Villages containing a population above 3,000 inhabitants.
Do. do. between 500 and 3,000 inhabitants.
Do. do. below 500 inhabitants.

It would then, I think, be possible to see in which groups registration was most defective and in which disease had most prevailed.

WESTERN REGISTRATION DISTRICT.

COLLECTORATES.

1. Khándesh. | 3. Tháus.
2. Násik. | 4. City of Bombay.
5. Kolába.

40. In the Khándesh Collectorate during the year 1887, cholera was present throughout the Collectorate except in the táluka Pimpalner and its petha Nizámpur and the town of Nandurbár, and caused 3,360 deaths or 2·72 per 1,000 of population against 21 or 0·02 in 1886. Small-pox prevailed to a great extent in each táluka and town in the Collectorate. The recorded deaths for the Collectorate were 2,678 or 2·16 per 1,000 against 277 or 0·22, but the death-rate (5·69 per 1,000) in the táluka of Sávda and its pethas Yával and Ráver was very high. The death-rate (4·23 per 1,000) in the town of Chopda was also high. The general death-rate from fevers for the Collectorate was 26·34 against 22·90 in 1886, but a high death-rate took place in the tálukás of Jamner, Chálisgaon and Chopda.

Khándesh.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population for 1886.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Khándesh.	Dhulia R. C. ...	59,688	757·16	78·83	152	3,162	52·98	51·07	195	3·27	180	3·02	1,740	29·15	366	6·13	17	0·28	105	1·76	2,603	43·61	30·86
	Amalner „ ...	88,986	527·	168·85	225	4,336	48·73	43·69	292	3·28	268	3·01	2,429	27·30	454	5·10	22	0·25	90	1·01	3,555	39·95	28·45
	Párola Petha „ ...																						
	Erandol „ ...	90,872	460·	197·55	198	4,102	45·14	40·46	240	2·64	265	2·92	2,223	24·46	616	6·78	30	0·33	166	1·83	3,540	38·96	29·95
	Páchora „ ...	100,051	535·	187·01	187	4,274	42·72	36·23	285	2·85	47	0·47	2,702	27·01	432	4·32	29	0·29	231	2·31	3,726	37·24	27·95
	Bhadgaon Petha „ ...																						
	Chálisgaon „ ...	59,031	504·	117·13	132	3,051	51·68	43·64	179	3·03	56	0·95	1,884	31·92	200	3·39	16	0·27	123	2·08	2,458	41·64	28·23
	Pimpalner „ ...	87,549	1339·	65·38	236	2,859	32·66	27·97	..	...	26	0·29	1,652	18·87	258	2·95	24	0·27	18	0·21	1,978	22·59	19·67
	Nizámpur Petha „ ...																						
	Nandurbár „ ...	56,025	673·54	83·18	195	2,087	37·25	37·63	66	1·18	55	0·98	1,376	24·56	137	2·45	21	0·37	42	0·75	1,697	30·29	20·42
	Shahádá „ ...	64,368	479·	134·38	151	1,990	30·92	30·29	121	1·88	89	1·38	1,616	25·11	367	5·70	14	0·22	94	1·46	2,301	35·75	24·07
	Taloda „ ...	49,788	1177·	42·30	258	1,281	25·73	18·24	23	0·46	45	0·90	718	14·42	103	2·07	21	0·42	20	0·40	930	18·68	13·46
	Sindkheda „ ...	61,461	504·	121·95	140	3,175	51·66	43·21	32	0·52	227	3·69	1,842	29·97	530	8·62	25	0·41	91	1·48	2,744	44·64	31·27
	Shirpur „ ...	43,321	651·	66·55	99	1,897	43·79	38·48	80	1·85	24	0·55	1,177	27·17	239	5·52	7	0·16	15	0·35	1,542	35·60	26·24
	Chopda „ ...	45,903	367·52	124·90	91	1,978	43·09	37·40	241	5·25	139	3·03	1,402	30·54	320	6·97	8	0·17	13	0·28	2,123	46·25	31·52
	Sávda „ ...																						
	Yával Petha „ ...	1,41,745	553·	256·32	182	5,676	40·04	35·28	620	4·37	807	5·69	4,130	29·14	936	6·60	26	0·18	150	1·06	6,669	47·06	34·33
	Ráver Petha „ ...																						
	Bhusával „ ...																						
	Edalabad Petha „ ...	96,160	571·	168·41	188	3,718	38·61	33·48	394	4·10	120	1·25	2,457	25·55	617	6·42	31	0·32	97	1·01	3,716	38·64	33·35
	Jalgaon „ ...	59,283	317·83	186·52	87	2,644	44·60	39·52	322	5·43	212	3·58	1,683	28·39	367	6·19	20	0·34	147	2·48	2,751	46·40	32·57
	Jámner „ ...	83,535	525·	159·11	158	3,016	36·19	33·28	196	2·35	7	0·08	2,604	32·23	519	6·21	20	0·24	135	1·62	3,571	42·75	35·48
	Dhulia T. C. ...	18,449	1·84	10,026·63	1	610	33·05	27·32	8	0·44	24	1·30	310	16·80	59	3·20	5	0·27	53	2·87	459	24·88	16·38
	Nandurbár „ ...	6,841	0·16	14,871·74	1	148	21·63	15·93	..	...	20	2·92	130	19·00	64	9·36	2	0·29	6	0·88	222	34·45	23·89
	Chopda „ ...	13,932	0·48	29,025·	1	276	19·81	20·46	25	1·79	59	4·23	207	14·86	..	...	3	0·22	...	...	294	21·10	21·39
	Nasirabad „ ...	10,243	0·17	60,252·94	1	323	31·53	22·46	34	3·32	8	0·78	212	20·69	30	2·93	..	...	9	0·88	293	28·60	15·52
	1887 ..	1,237,231	9·944	124·42	2,653	50,607	40·90	...	3,360	2·72	2,678	2·16	32,584	26·34	6,604	5·34	341	0·28	1603	1·30	47,172	38·13	...
	1886 ...					44,811	36·21	...	21	0·02	277	0·22	28,330	22·90	5,390	4·28	270	0·22	830	0·67	35,028	28·31	...
	Mean for 10 years, 1877—1886 ...					36,139	31·32	...	2,406	2·09	900	0·78	22,126	19·18	4,386	3·80	285	0·25	892	0·77	30,995	26·86	...

N.B.—The births and deaths for Pethas are included in those for their respective tálukás as the population of these is not shown separately in the Census Report.

Násik.

41. In the Násik Collectorate during 1887 cholera prevailed throughout the Collectorate except the tálukás of Igatpuri and Peint and the Cantonment of Devláli. It caused 894 deaths or 1·14 per 1,000 against 2 or 0·00 in 1886. Small-pox also prevailed more or less throughout the Collectorate except the tálukás of Chándor and Peint and the Cantonment of Devláli. The general death-rate from small-pox was 0·28 per 1,000 against 0·01 in 1886.

The general death-rate from fevers for the Collectorate was 22·60 per 1,000 of population against 17·97 in 1886; but a high death-rate took place in the tálukás of Nándgaon and Málegaon, in which it was 38·75 and 30·88 per 1,000 respectively. From bowel-complaints the death-rate for the Collectorate was 3·87 per 1,000 against 2·39 in 1886, but in Báglán Táluka it was 6·97, Niphád 5·45 and Chándor 5·13:—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Násik.	Násik R. C. ...	67,910	464·44	146·22	135	2,425	35·71	31·09	6	0·08	8	0·12	1,097	16·15	167	2·46	12	0·18	266	3·92	1,556	22·91	17·20
	Sinnar ,, ...	66,081	519·	127·32	99	3,195	48·33	41·28	20	0·30	39	0·59	1,528	23·12	255	3·86	14	0·21	370	5·60	2,226	33·68	23·86
	Igatpuri ,, ...	68,749	376·	182·84	128	2,061	29·98	30·52	...	...	28	0·41	1,095	15·93	87	1·26	13	0·19	114	1·66	1,337	19·45	15·75
	Dindori ,, ...	72,290	529·	136·54	128	3,168	43·82	39·27	16	0·22	1	0·01	1,431	19·80	359	4·97	14	0·19	329	4·55	2,150	29·74	22·91
	Niphád ,, ...	87,523	411·	212·95	121	3,415	39·02	33·94	35	0·40	4	0·15	1,933	22·09	477	5·45	8	0·09	446	5·10	2,903	33·18	20·35
	Chándor ,, ...	50,859	385·	132·21	108	2,112	41·49	35·16	61	1·20	...	...	1,201	23·16	261	5·13	3	0·06	101	1·98	1,727	33·93	23·05
	Yeola ,, ...	35,597	411·78	86·45	117	1,569	43·82	32·23	85	2·39	5	0·14	818	22·98	105	2·95	5	0·14	76	2·13	1,094	30·73	21·44
	Nándgaon ,, ...	30,399	437·	69·56	88	1,611	52·99	45·80	156	5·13	5	0·16	1,178	38·75	106	3·49	10	0·33	47	1·55	1,502	49·41	31·61
	Málegaon ,, ...	74,718	775·	96·41	44	3,005	41·42	40·75	305	4·08	83	1·11	2,307	30·88	347	4·64	11	0·15	74	0·99	3,127	41·85	25·83
	Báglán ,, ...	64,875	619·	104·81	155	3,174	48·92	41·36	67	1·03	6	0·09	1,660	25·73	452	6·97	17	0·26	63	0·97	2,274	35·05	25·91
	Kalvan ,, ...	58,456	554·	105·57	167	2,001	39·34	35·26	1	0·02	2	0·04	1,294	20·58	227	3·83	6	0·19	94	1·61	1,534	26·23	22·98
	Peint ,, ...	55,144	453·	120·49	221	2,130	38·63	39·51	...	...	...	...	1,294	23·46	13	0·24	24	0·44	27	0·49	1,358	24·63	22·92
	Násik T. C. ...	24,101	0·59	43,037·50	1	478	19·83	19·54	74	3·07	2	0·08	321	13·31	83	3·44	3	0·12	207	8·59	690	28·62	24·39
	Yeola ,, ...	17,685	0·22	80,386·26	1	564	28·50	24·03	40	2·26	26	1·47	389	21·99	77	4·35	3	0·17	127	7·18	662	37·43	29·12
	Devláli Ct. ...	1,036	...	...	...	56	51·57	20·26	...	...	...	...	10	9·21	3	2·76	...	...	15	13·81	28	25·78	23·02
	Málegaon ,, ...	3,780	...	...	...	148	39·15	38·39	28	7·40	10	2·65	77	20·37	...	...	...	...	106	28·04	221	58·46	31·48
	Europeans and Eurasians and fighting men in the Cantonment of Devláli ...	1,883																					
	1887 ...	781,206	5·940	131·51	1,638	31,433	40·23	...	894	1·14	219	0·28	17,652	22·60	3,019	3·87	143	0·18	2,462	3·15	24,389	31·22	...
	1886 ...					28,147	36·03	...	2	...	9	0·01	14,042	17·97	1,864	2·39	135	0·17	1,622	2·08	17,674	22·62	...
	Mean for 10 years, 1877—1886 ...					23,583	31·32	...	1,179	1·56	475	0·63	15,610	20·73	1,939	2·57	156	0·21	2,006	2·67	21,365	28·37	...

N.B.—The area, in square miles, of the Cantonments of Devláli and Málegaon are included in the towns of Násik and Malegaon, respectively, as they are not separately shown in the Census Report.

Thána.

42. In the Thána Collectorate cholera broke out in March in the Murbád Táluka and then spread throughout the Collectorate, except the táluka of Dáhánu and the town of Thána in which no deaths from this disease were recorded. The total deaths recorded from this cause for the Collectorate were 1,228 or 1·52 per 1,000 of population against 8 or 0·01 in 1886. Small-pox prevailed in the tálukás of Sháhápur, Bhiwndi, Bassein and Salsette and the town of Thána, and caused 50 deaths or 0·06 per 1,000 of population against 13 or 0·02 in 1886. The general death-rate from fevers for the Collectorate was 18·91 per 1,000 against 18·26 in 1888, but high death-rates (23·79 and 23·05 per 1,000) took place in the tálukás of Bhiwndi and Váda respectively. The death-rates (22·88 and 21·55 per 1,000) in the Sháhápur and Murbád Tálukás respectively were also high. From bowel-complaints the death-rate for the Collectorate was 1·15 per 1,000 against 0·52 in 1886:—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel complaints. Number.	Bowel complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Thána.	Dáhánu R. C. ...	109,322	643·	170·02	209	3,614	33·13	31·76	...	...	...	...	1,809	16·55	89	0·81	86	0·79	174	1·59	2,158	19·74	16·65
	Máhim „ ...	77,360	419·	184·63	186	2,337	30·33	26·09	110	1·42	...	...	1,403	18·14	25	0·32	30	0·38	140	1·81	1,708	22·08	16·66
	Váda „ ...	36,493	310·	117·72	153	1,421	38·94	33·18	16	0·44	...	...	841	23·05	37	1·01	18	0·49	80	2·19	992	27·18	26·19
	Sháhápur „ ...	107,729	870·	123·83	273	3,756	34·87	29·44	117	1·09	4	0·04	2,465	22·88	65	0·60	62	0·57	85	0·79	2,708	25·97	22·46
	Murbád „ ...	63,934	351·	182·15	171	2,062	32·25	30·38	172	2·69	...	...	1,378	21·55	97	1·52	35	0·55	59	0·92	1,741	27·23	25·79
	Kalyán „ ...	65,078	275·50	236·22	222	2,356	36·20	31·10	135	2·07	...	...	1,331	20·45	109	1·67	22	0·34	130	2·00	1,727	26·53	22·99
	Bhiwndi „ ...	75,363	250·	301·45	194	2,711	35·97	28·99	260	3·45	22	0·29	1,793	23·79	105	1·39	19	0·25	195	2·59	2,394	31·76	24·53
	Bassein „ ...	68,967	221·	312·07	92	1,715	24·87	21·61	110	1·59	19	0·28	1,120	16·24	36	0·52	33	0·48	115	1·67	1,433	20·78	19·13
	Sálsette „ ...	93,623	234·02	400·35	112	2,548	27·20	22·47	138	1·47	3	0·03	1,376	14·69	166	1·77	34	0·36	241	2·57	1,958	20·89	20·55
	Karjat „ ...	82,062	353·	232·47	2·8	2,773	33·79	31·06	150	1·83	...	...	1,543	18·80	158	1·92	37	0·45	141	1·72	2,029	24·72	21·80
	Thána T. C. ...	14,456	6·28	2,071·06	1	125	8·65	6·09	...	...	2	0·14	122	8·44	25	1·73	8	0·55	52	3·60	209	14·46	14·18
	Kalyán „ ...	12,910	2·50	5,164	1	175	13·55	13·49	20	1·55	...	...	84	6·50	14	1·09	6	0·46	37	2·87	161	12·47	12·08
	1887 ...	807,367	3,956·	205·12	1,882	25,643	31·76	[illegible]	1,228	1·52	50	0·06	15,205	18·91	926	1·15	390	0·48	1,449	1·80	19,308	23·91	...
	1886 ...					22,657	28·06	...	8	0·01	13	0·02	14,745	18.26	419	0·52	448	0·55	1,242	1·54	16,875	20·90	...
	Mean for 10 years, 1877—86 ...					20,747	25·20	...	1,082	1·31	369	0·45	14,222	17·39	296	0·36	394	0·48	1,712	2·08	18,175	22·07	...

43. In the city of Bombay there were 262 deaths or 0·34 per 1,000 from cholera, against 17 or 0·02 in 1886. Small-pox prevailed throughout the year and caused 110 deaths or 0·14 per 1,000, against 18 or 0·02 in 1886. The mean death-rate for the previous 10 years was 0·52. The death-rate from fevers was 7·26 per 1,000 against 7·56 in 1886, and the death-rate from all causes was 26·19 per 1,000 against 25·62 in 1886 and a decennial mean of 32·12 :—

City of Bombay.

Year.	Population according to Census of 1881.	Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.
1887	773,196	262	0·34	110	0·14	5,613	7·26	1,596	2·06	349	0·45	12,322	15·94	20,252	26·19
1886		17	0·02	18	0·02	5,843	7·56	1,465	1·89	372	0·48	12,097	15·65	19,812	25·62
Mean for 10 years, 1877—1886.		603	0·96	374	0·52	7,527	10·43	2,073	2·87	344	0·48	12,167	16·86	23,178	32·12

44. In the Kolába Collectorate cholera was present in each táluka except Pen and its petha Nágothna. Among the town circles only 1 death took place in the town of Mahád. The general death-rate from cholera for the Collectorate was 0·49 per 1,000 of population against 0·08 in 1886. Small-pox prevailed to a slight extent in all the rural registration circles except Roha, but no deaths from it were recorded in the town circles. The general death-rate from this cause for the Collectorate was 0·15 per 1,000 against 0·07 in 1886; but a high death-rate took place in the tálukás of Pen and its petha Nágothna and Panvel, in which the recorded death-rates were respectively 0·44 and 0·32 per 1,000. The general death-rate from fevers for the Collectorate was 16·34 per 1,000 against 16·30 in 1886 and a decennial mean of 16·77; but the death-rate (19·09 per 1000) in the táluka of Panvel was high :—

Kolába.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Kolába.	Panvel R. C. ..	90,820	304·	298·78	218	3,301	36·34	33·19	75	0·83	29	0·32	1,734	19·09	112	1·23	34	0·37	160	1·75	2,144	23·60	21·17
	Alibág " ..	69,762	193·40	360·61	171	2,517	36·08	31·79	96	1·38	4	0·06	1,233	17·67	101	1·45	21	0·30	315	4·51	1,770	25·37	24·05
	Pen " .. / Nágothna Petha R. C. ..	70,290	298·	235·57	199	2,263	32·23	32·45	..	..	31	0·44	1,331	18·96	72	1·03	30	0·43	144	2·05	1,608	22·91	22·08
	Roha " ..	44,835	200·	224·18	133	1,596	35·60	32·74	42	0·94	..	..	837	18·67	66	1·47	16	0·36	176	3·92	1,137	25·36	24·33
	Mángaon " ..	81,085	353·	229·70	225	2,367	29·19	27·17	10	0·12	3	0·04	1,137	14·02	131	1·61	29	0·36	248	3·06	1,558	19·21	18·54
	Mahád " ..	102,587	453·57	223·71	245	2,907	28·34	27·76	14	0·14	5	0·05	1,383	13·48	81	0·79	33	0·32	305	2·97	1,821	17·75	15·98
	Panvel T. C. ..	10,351	3·	3,450·33	1	298	28·79	25·99	..	..	..	..	60	5·80	31	2·99	4	0·39	48	4·64	143	13·82	11·40
	Alibag " ..	6,376	0·60	10,626·67	1	138	21·64	21·33	..	..	..	..	103	16·15	22	3·45	3	0·47	33	5·18	161	25·25	21·17
	Mahád " ..	6,804	0·43	15,823·26	1	136	19·99	17·93	1	0·15	..	..	70	10·30	24	3·52	1	0·15	26	3·82	122	17·93	20·72
	1887 ..	482,830	1,811·	266·61	1,194	15,523	32·15	..	238	0·49	72	0·15	7,888	16·34	640	1·33	171	0·35	1,405	3·01	10,464	21·67	..
	1886 ..					14,551	30·14	..	41	0·08	34	0·07	7,871	16·30	363	0·75	160	0·33	1,307	2·71	9,776	20·24	..
	Mean for 10 years, 1877—1886 ...					11,613	27·02	..	693	1·61	184	0·43	7,210	16·77	241	0·56	168	0·39	1,517	3·73	10,013	23·29	..

N.B.—The births and deaths in Nágothna Petha are included in the Pen Táluka, as in the Census Report the population living in each is not shown separately.

CENTRAL REGISTRATION DISTRICT.

Collectorates.

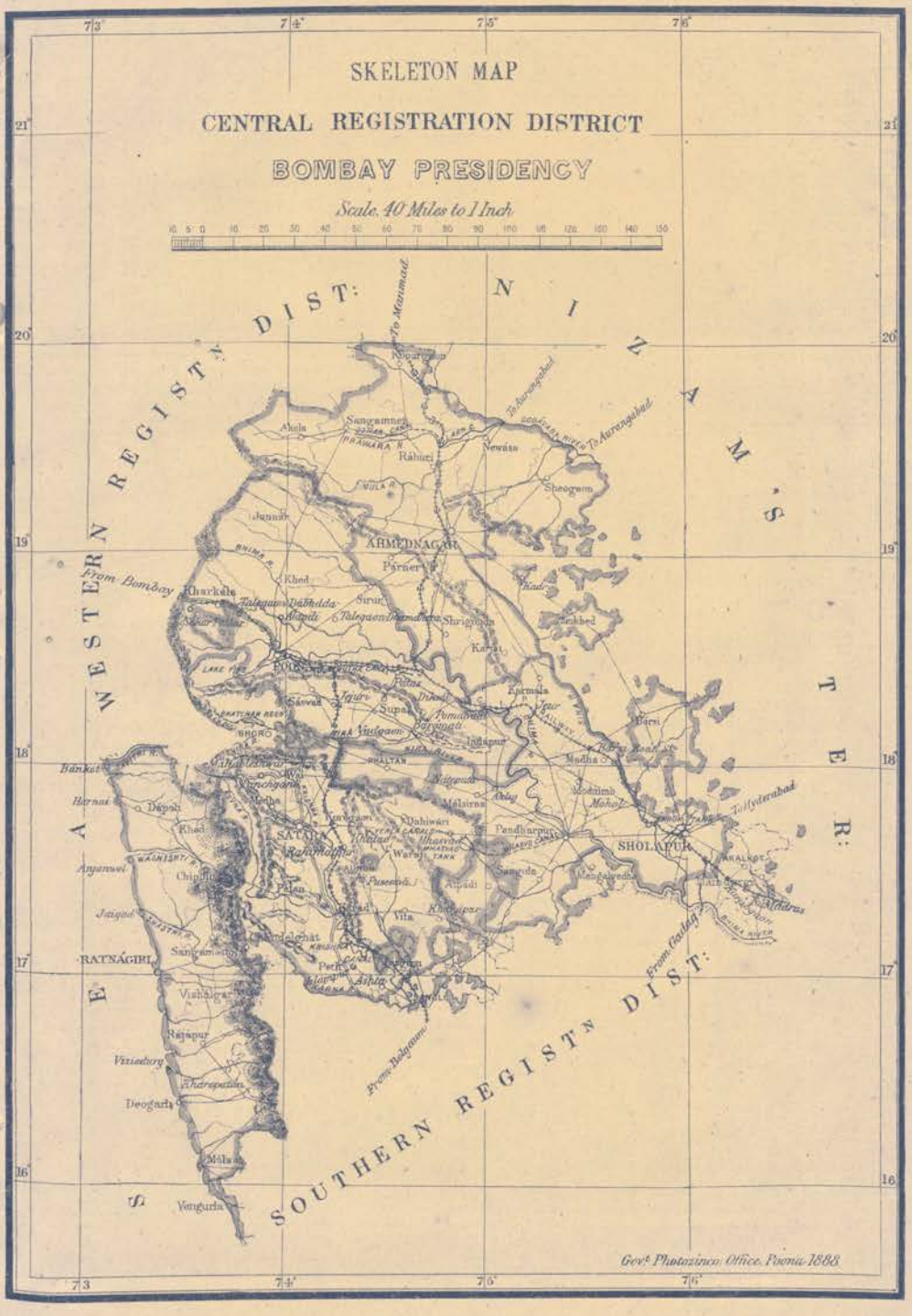
1. Ahmednagar.
2. Poona.
3. Sholápur.
4. Sátára.
5. Ratnágiri.

Ahmednagar.

45. In the Ahmednagar Collectorate during 1887 cholera was present throughout the Collectorate except the Cantonment of Ahmednagar and caused 2,954 deaths or 3·93 per 1,000. In 1886 no deaths were recorded from cholera. The death-rates during the year (8·10 and 7·91 per 1,000) in the tálukás of Jámkhed and Nevása respectively were very high. In the táluka of Karjat the death-rate (5·20) was also high. Small-pox prevailed to a slight extent, and caused 57 deaths against none in 1866. The general death-rate from small-pox for the Collectorate was 0·07 per 1,000, but a high death-rate (0·76 per 1,000) took place in the town of Ahmednagar. The general death-rate from fevers for the Collectorate was 22·35 per 1,000 of population against 20·11 in 1886, but a high death-rate took place in the tálukás of Karjat and Jámkhed, in which it was 26·79 and 26·43 respectively. The death-rate (25·86 per 1,000) which is nearly the same as that in the táluka of Shrígonda (25·44) in the táluka of Ahmednagar, was also very high :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Ahmednagar.	Nagar R. C. ..	71,468	618·50	115·53	108	3,637	50·90	42·15	260	3·64	..	..	1,848	25·86	238	3·33	6	0·08	296	4·14	2,648	37·05	29·66
	Akola " ..	60,800	588·	103·40	156	2,501	41·13	33·47	29	0·48	10	0·16	1,132	18·62	94	1·55	7	0·11	212	3·49	1,484	24·41	21·12
	Jámkhed " ..	60,900	482·	126·47	75	3,261	53·49	52·62	494	8·10	1	0·02	1,611	26·43	265	4·35	7	0·11	149	2·44	2,527	41·45	30·23
	Párner " ..	73,701	779·	94·61	122	3,448	46·78	38·28	184	2·50	..	..	1,385	18·79	127	1·72	11	0·15	239	3·24	1,946	26·40	22·02
	Shrígonda " ..	51,291	625·	82·06	84	2,708	52·79	38·82	118	2·30	9	0·17	1,305	25·44	162	3·16	8	0·16	234	4·48	1,832	35·71	21·73
	Karjat " ..	54,820	589·	60·03	79	2,239	64·30	54·8[illegible]	181	5·20	..	..	933	26·79	191	5·49	4	0·11	130	3·73	1,439	41·32	27·71
	Nevása " ..	78,158	667·	128·76	145	3,593	45·97	42·25	618	7·91	..	..	1,673	21·41	300	3·84	5	0·06	514	6·57	3,110	39·79	27·14
	Kopargaon " ..	63,789	511·	124·83	121	3,283	51·62	42·11	167	2·61	1	0·02	1,536	24·08	264	4·14	4	0·06	228	3·54	2,198	34·46	26·24
	Sangamner " ..	59,561	707·41	84·20	151	3,583	60·16	52·33	104	1·75	..	..	1,328	22·30	128	2·15	5	0·09	595	9·98	2,160	36·27	29·97
	Ráhuri " ..	58,279	497·	127·34	111	3,137	49·33	40·73	268	4·23	10	0·16	1,511	23·88	213	3·37	4	0·06	150	2·37	2,156	34·07	25·63
	Shevgaon " ..	87,113	670·	130·02	180	4,024	46·19	41·24	422	4·85	1	0·01	1,929	22·26	378	4·34	4	0·05	394	4·52	3,138	36·02	26·83
	Ahmednagar T. C. ..	32,903	0·50	65,806·	1	6,397	39·42	32·61	69	2·10	25	0·76	367	11·15	169	4·86	8	0·24	565	17·11	1,192	36·22	33·10
	Sangamner " ..	8,796	0·59	14,908·47	1	489	55·59	55·02	40	4·55	..	..	165	18·76	9	1·02	..	..	140	15·92	354	40·25	32·40
	Ahmednagar Ct. ..	4,589	..	..	..	79	17·21	18·09	..	..	..	..	55	11·98	6	1·31	..	..	19	4·14	80	17·43	17·65
	1887 ..	751,228	6,666	112·69	1,334	37,279	49·62	..	2,954	3·93	57	0·07	16,788	22·35	2,536	3·37	73	0·10	3,857	5·13	26,264	34·96	..
	1886 ..					32,188	42·85	..	..	..	..	..	15,107	20·11	1,873	2·49	96	0·13	2,915	3·88	19,991	26·61	..
	Mean for 10 years, 1877—1886..					24,543	32·28	..	1,628	2·18	214	0·32	15,025	19·76	1,935	2·67	166	0·22	2,868	3·77	21,918	28·83	..

N.B.—The area in square miles for the Cantonment of Ahmednagar is included in the town of Ahmednagar, as it is not separately shown in the Census Report.


SKELETON MAP
CENTRAL REGISTRATION DISTRICT
BOMBAY PRESIDENCY
Scale, 40 Miles to 1 Inch
NIZAM'S TER:
WESTERN REGISTN DIST:
SOUTHERN REGISTN DIST:
SEA
To Manmad
To Aurangabad
From Bombay
From Gadag
From Belgaum
AHMEDNAGAR
POONA
SATARA
SHOLAPUR
RATNAGIRI
Akola
Sangamner
Rahuri
Newasa
Sheogaon
Junnar
Parner
Khed
Kharkala
Sirur
Shrigonda
Karjat
Karmala
Jejuri
Supa
Indapur
Madha
Barsi
Mohol
Pandharpur
Mangalwedha
Sangola
Atpadi
Khanapur
Vita
Patan
Chipli
Chandelghat
Vishalgar
Rajapur
Vizieduru
Kharepatan
Deogarh
Malwan
Vengurla
Banket
Harnai
Dapoli
Khed
Anjanwel
Jaigad
Sangamner
Vishalgar
Rajapur
Vizieduru
Kharepatan
Deogarh
Malwan
Vengurla
Gov^t Photozinco Office, Poona 1888

Poona.

46. In the Poona Collectorate during 1887 cholera was present throughout the Collectorate except in the town of Junnar and the Cantonment of Kirkee. The outbreak caused 2,058 deaths or 2·28 per 1,000 of population against 50 or 0·05 in 1886. The death-rates (6·18 and 3·15 per 1,000) in the táluka of Purandhar and in the city of Poona, respectively, were very high. Small-pox prevailed in each táluka except Sirúr. Among the town circles there were only 3 deaths recorded from it in the city of Poona. The general death-rate from this cause for the Collectorate was 0·16 per 1,000 against 0·02 in 1886, but a high death-rate (0·59 per 1,000) took place in Junnar Táluka. The general death-rate from fevers for the Collectorate was 19·95 per 1,000 against 16·40 in 1886, but a high death-rate (26·85 per 1,000) took place in the táluka of Indápur. The death-rates (26·06 per 1,000) in the táluka of Junnar, (22·97) in Purandhar and (22·52) in Bhimthadi were very high. The general death-rate from all causes for the Collectorate was 30·13 per 1,000, but high death-rates (35·41 and 35·14 per 1,000 against 24·44 and 22·90 in 1886) took place in the tálukás of Junnar and Purandhar respectively. Investigations will be undertaken to see whether the opening of the Nèera Canal has caused an increase in the deaths from fevers :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Deaths. Cholera. Number.	Deaths. Cholera. Ratio per 1,000 of Population.	Deaths. Small-pox. Number.	Deaths. Small-pox. Ratio per 1,000 of Population.	Deaths. Fevers. Number.	Deaths. Fevers. Ratio per 1,000 of Population.	Deaths. Bowel-complaints. Number.	Deaths. Bowel-complaints. Ratio per 1,000 of Population.	Deaths. Injuries. Number.	Deaths. Injuries. Ratio per 1,000 of Population.	Deaths. Other Causes. Number.	Deaths. Other Causes. Ratio per 1,000 of Population.	Deaths. All Causes. Number.	Deaths. All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Poona.	Junnar R. C. ..	81,900	610·64	150·50	153	4,427	48·17	41·45	154	1·68	54	0·59	2,395	26·06	202	2·20	26	0·28	423	4·60	3,254	35·41	24·44
	Khed „ ..	141,890	888·	159·79	244	5,767	40·64	33·92	232	1·64	22	0·15	3,003	21·16	272	1·92	59	0·42	525	3·70	4,113	28·99	20·77
	Indápur „ ..	48,114	567·	86·46	88	3,075	63·91	49·01	83	1·70	2	0·04	1,292	26·85	152	3·16	14	0·29	140	2·91	1,662	34·96	24·92
	Sirúr „ ..	72,792	577·	126·16	76	2,773	38·09	22·93	51	0·70	..	..	1,594	21·90	148	2·03	12	0·16	192	2·64	1,997	27·43	18·30
	Purandhar „ ..	75,678	470·	161·02	92	3,444	45·51	39·88	468	6·18	1	0·01	1,738	22·97	161	2·13	20	0·26	271	3·58	2,659	35·14	22·90
	Bhimthadi „ ..	110,428	1,037·	106·49	119	4,506	40·80	32·98	300	2·72	2	0·02	2,487	22·52	197	1·78	29	0·26	418	3·79	3,433	31·09	18·83
	Haveli „ ..	150,059	799·23	187·76	237	6,101	40·66	35·98	346	2·31	4	0·03	2,918	19·45	430	2·85	56	0·37	702	4·68	4,456	29·69	24·10
	Mával „ ..	62,383	385·	161·03	164	1,638	26·26	26·58	701	1·62	8	0·13	858	13·75	113	1·81	16	0·26	156	2·50	1,252	20·07	16·41
	Poona City T. C. ..	99,622	5·	19,924·40	1	2,328	23·39	27·44	314	3·15	3	0·03	1,161	11·65	176	1·77	61	0·61	1,511	15·17	3,226	32·38	25·77
	Junnar „ ..	10,373	0·26	28,813·89	1	472	45·50	43·09	..	...	..	..	85	8·19	32	3·08	...	...	170	16·39	287	27·66	29·40
	Poona Ct. ..	25,042	4·55	6,621·76	1	757	30·23	28·95	10	0·40	..	..	404	16·13	30	1·20	6	0·24	204	8·15	654	26·12	27·19
	Kirkee „ ..	3,560	4·22	1,718·48	1	153	42·98	37·92	..	...	..	..	31	8·70	8	2·25	1	0·28	85	23·88	125	35·11	35·39
	Europeans, Eurasians and fighting men in the Cantonments of Poona and Kirkee ..	8,779	..	..	..	..	..	..	..	...	..	..	..	..	..	..	..	..	..	..	..	..	..
	1887 ..	900,621	5,348	168·40	1,185	35,941	30·91	..	2,058	2·28	96	0·16	17,966	19·95	1,921	2·13	300	0·30	4,797	5·32	27,138	30·13	..
	1886 ..					31,165	34·60	...	50	0·05	14	0·02	14,772	16·40	1,354	1·50	318	0·25	3,347	2·72	19,855	22·04	..
	Mean for 10 years, 1877—1886 ..					22,709	25·14	..	1,744	1·93	369	0·41	15,077	16·69	1,565	1·73	322	0·36	2,916	3·23	21,993	24·35	..

Sholápur.

47. In the Sholápur Collectorate cholera was present throughout the Collectorate in a most severe type and caused 2,984 deaths or 5·12 per 1,000 of population against 4· or 0·01 in 1886. The death-rates (10·41 and 8·57 per 1,000) in the táluka and town of Pandharpur, respectively, were very high. Small-pox caused only 2 deaths, of which 1 was recorded in the táluka of Sholápur and 1 in the town of Bársi. The general death-rate from fevers for the Collectorate was 22·83 per 1,000 against 19·50 in 1886, but the death-rates (30·27 and 25·53 per 1,000) in the tálukás of Karmála and Málsiras, respectively, were very high. The death-rates (24·25 and 23·24) in the towns of Bársi and Pandharpur, respectively, were also high :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Populations in 1886.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population in 1887.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Sholápur.	Sholápur R. C.	89,649	845·67	106·01	146	4,351	48·53	44·32	497	5·54	1	0·01	1,687	18·82	157	1·75	13	0·14	310	3·46	2,665	29·72	19·67
	Bársi ,,	93,920	595·62	157·68	122	4,622	49·21	49·26	234	2·49	..	..	2,151	22·99	178	1·90	25	0·27	344	3·66	2,932	31·22	25·14
	Módha ,,	67,961	619·	109·79	89	4,011	59·02	53·10	422	6·22	..	..	1,531	22·55	355	5·22	12	0·18	215	3·16	2,536	37·31	24·31
	Karmála ,,	61,548	766·	80·35	123	4,270	69·38	54·22	400	6·50	..	..	1,863	30·27	138	2·24	5	0·08	260	4·22	2,666	43·31	27·83
	Pandharpur ,,	55,302	469·49	117·79	84	3,075	55·60	46·13	576	10·41	..	..	1,263	22·83	117	2·11	12	0·22	342	6·18	2,310	41·77	22·65
	Sángola ,,	62,849	649·	96·84	76	3,448	54·88	46·67	162	2·58	..	..	1,270	20·21	102	1·62	10	0·16	276	4·39	1,824	29·96	23·28
	Málsiras ,,	58,332	574·	101·62	69	2,922	50·08	43·63	219	3·75	..	..	1,489	25·53	66	1·13	4	0·07	105	1·80	1,883	32·28	19·65
	Sholápur T. C.	59,890	1·33	45,030·07	1	1,187	19·82	22·83	256	4·27	..	..	1,258	21·01	145	2·42	10	0·17	342	5·71	2,011	33·58	30·07
	Bársi ,,	16,126	0·38	42,436·84	1	434	26·91	19·72	72	4·46	1	0·06	391	24·25	43	2·67	12	0·74	175	10·85	694	43·03	31·13
	Pandharpur ,,	16,910	0·51	33,156·86	1	769	44,94	43·94	145	8·57	..	..	393	23·24	136	8·04	5	0·30	85	5·03	764	45·18	31·75
	1887 ..	552,487	4,521·	122·84	712	29,081	49·93	..	2,984	5·12	2	0·01	13,296	22·81	1,437	2·47	108	0·19	2,454	4·21	20,281	34·82	..
	1886 ..					25,999	44·63	..	4	0·01	6	0·01	11,358	19·50	1,097	1·88	145	0·25	1,581	2·71	14,191	24·36	..
	Mean for 10 years, 1877—1886 ..					16,428	25·80	..	1,117	1·75	163	0·26	11,901	18·69	1,676	2·63	207	0·33	3,602	5·66	18,666	29·32	..

48. In the Sátára Collectorate cholera was present throughout the Collectorate, except the táluka of Malcolmpeith, and caused 6,957 deaths or 6·55 per 1,000 against 13 or 0·01 in 1886. The death-rates (14·25 and 12·35 per 1,000) in the tálukás of Khánápur and Tásgaon respectively were very high. Small-pox caused no deaths during the year. The general death-rate from fevers for the Collectorate was 21·68 per 1,000 against 19·68 in 1886, but a very high death-rate (31·37 per 1,000) took place in the táluka of Khatáv. The death-rates in the tálukás of Mán, Sátára, Wái and Koregaon were also very high, as compared with the rate of the Collectorate :—

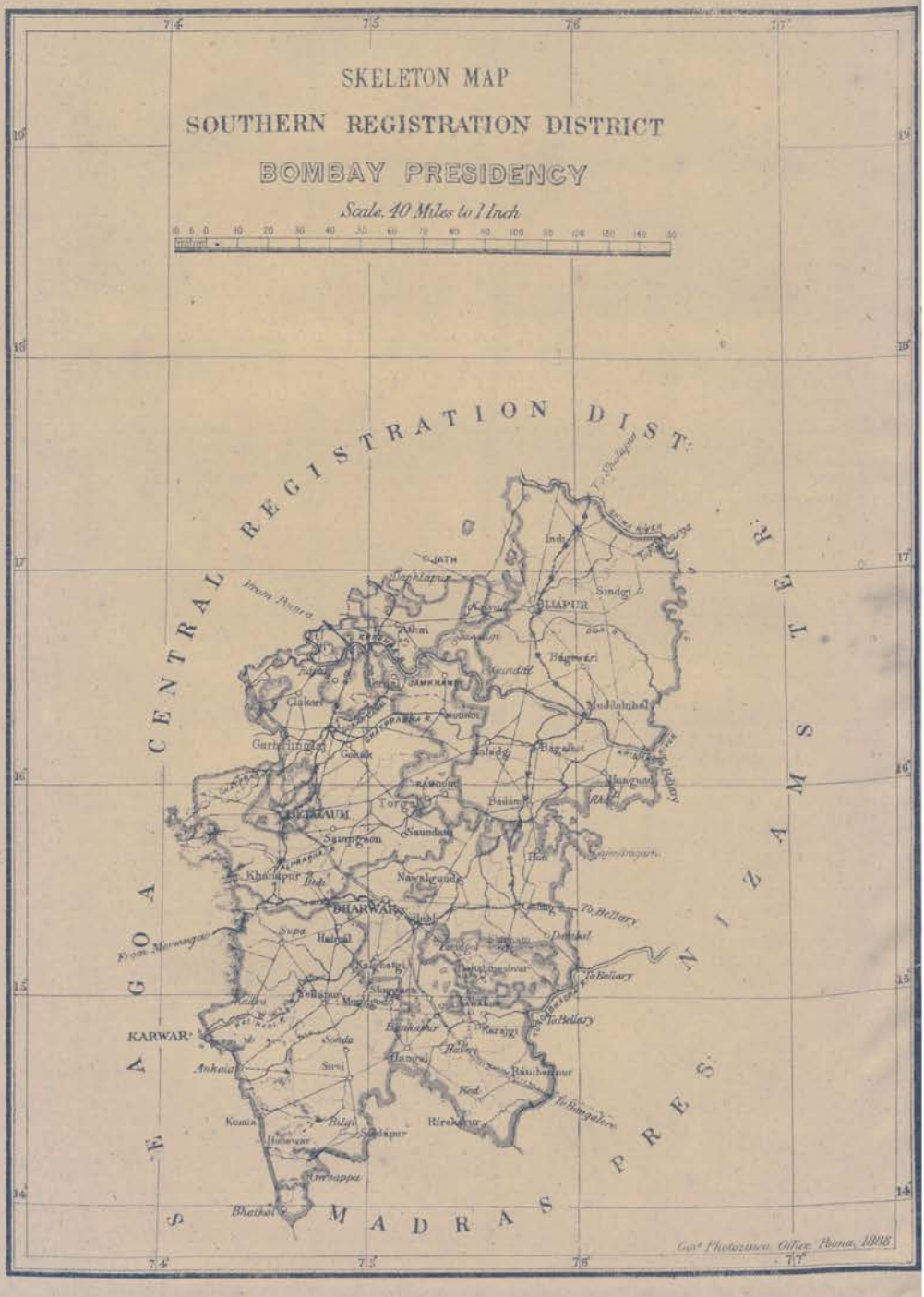
Sátára.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population in 1887.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Sátára.	Sátára R. C. ..	90,885	335·18	271·15	147	4,499	49·50	44·22	375	4·13	..	..	2,484	27·33	99	1·09	28	0·31	334	3·67	3,320	36·53	29·08
	Jávli ,, ..	53,793	419·	128·38	197	2,125	39·50	36·29	36	0·67	..	..	1,012	18·81	37	0·69	15	0·28	203	3·77	1,303	24·22	22·49
	Wái ,, ..	76,934	390·	197·27	124	3,096	47·65	41·18	266	3·46	..	..	2,013	26·17	90	1·17	22	0·29	221	2·89	2,614	33·98	28·32
	Karád ,, ..	130,142	394·63	329·78	103	5,731	44·03	41·06	952	7·31	..	..	2,946	22·71	528	4·06	30	0·23	571	4·39	5,037	38·70	23·83
	Válva ,, ..	160,408	515·	311·99	136	6,429	38·01	37·33	1,176	6·94	..	..	2,664	14·00	631	3·73	73	0·43	805	4·75	5,549	32·76	22·62
	Tásgaon ,, ..	79,704	341·	233·74	49	3,637	45·63	42·36	984	12·35	..	..	1,175	14·74	432	5·42	31	0·39	599	7·52	3,221	40·41	23·34
	Khánápur ,, ..	80,327	531·	151·27	91	3,972	49·45	47·36	1,145	14·25	..	..	1,757	21·87	256	3·19	17	0·21	291	4·57	3,566	44·39	23·66
	Khatáv ,, ..	74,027	497·	148·91	84	4,189	56·59	52·02	598	8·08	..	..	2,322	31·37	121	1·63	10	0·26	222	3·00	3,252	44·24	29·51
	Mán ,, ..	52,111	649·	80·29	78	3,419	65·61	54·94	394	7·56	..	..	1,437	27·58	56	1·07	17	0·33	230	6·33	2,224	42·67	27·07
	Malcolmpeith ,, ..	9,936	..	..	55	266	26·77	23·45	..	..	..	..	108	10·87	12	1·21	3	0·30	26	2·62	149	15·00	18·21
	Koregaon ,, ..	81,187	349·	232·63	74	3,776	46·51	43·48	517	6·37	..	..	2,108	25·96	221	2·72	19	0·23	235	2·89	3,100	38·18	27·43
	Pátan ,, ..	112,414	536·	209·73	202	4,848	43·13	42·25	341	3·03	..	..	2,046	18·20	85	0·76	36	0·32	515	4·58	3,023	26·89	22·66
	Sátára T. C. ..	29,028	0·82	35,400·	1	938	32·31	34·32	36	1·24	..	..	431	14·85	170	5·86	10	0·34	217	7·47	864	29·76	25·45
	Wái ,, ..	11,676	2·	5,838·	1	482	41·28	35·11	41	3·77	..	..	100	16·27	33	2·83	3	0·26	167	8·82	373	31·95	24·76
	Karád ,, ..	10,778	0·37	29,129·73	1	217	20·13	20·50	93	8·63	..	..	138	12·80	41	3·80	4	0·37	70	6·50	346	32·10	23·66
	1887 ..	1,062,350	4,988·	212·98	1,343	48,204	45·37	..	6,957	6·55	..	..	23,031	21·68	2,812	2·65	327	0·31	4,844	4·56	37,971	35·74	..
	1886 ..					44,988	42·35	..	12	0·01	1	..	20,897	19·68	2,444	2·30	246	0·23	3,637	3·42	27,238	25·64	..
	Mean for 10 years, 1877—1886 ..					35,900	33·80	..	1,985	1·87	265	0·25	21,232	20·00	2,789	2·63	367	0·34	3,238	3·05	29,876	28·14	..

N.B.—The area in square miles of Malcolmpeith is included in Jávli Táluka, as in the Census Report.

49. In the Ratnágiri Collectorate cholera was present throughout the Collectorate, except the tálukás of Rájápur, and Sangameshvar and the town of Vengurla. The outbreak caused 242 deaths or 0·24 per 1,000. Small-pox prevailed to a slight extent in all the rural registration circles, except Sangameshvar and Dápoli. Amongst the town circles there was only one death recorded in the town of Vengurla. The general death-rate from small-pox for the Collectorate was 0·02 per 1,000 against 0·03 in 1886. The general death-rate from fevers for the Collectorate was 8·83 per 1,000 against 9·34 in 1886; but a comparatively high death-rate (11·40 per 1,000), which is nearly the same as that in the táluka of Chiplún (11·22) took

Ratnágiri.


SKELETON MAP
SOUTHERN REGISTRATION DISTRICT
BOMBAY PRESIDENCY
Scale. 40 Miles to 1 Inch
CENTRAL REGISTRATION DIST:
SEAGOA
NIZAMS TER:
MADRAS PRES:
JATH
Daphlapur
From Pupra
Athni
Indi
Sindgi
LIAPUR
Bagewari
Muddabihal
Bagalkot
Hungund
Bagalkot
Gokak
Gurlerlingal
Torgal
Saundatti
Sampgaon
Khanapur
Nawalgund
DHARWAR
Hubli
Supa
Haliyal
From Marmagao
Kalghatgi
Yellapur
Mugdgod
Sonda
Sirsi
Ankola
KARWAR
Kumta
Bilgi
Sadapur
Hirekarur
Ranibennur
Karajgi
Hangal
Hawen
Bankapur
Ghatkal
To Bellary
To Bangalore
Bhatkal
Gov. Photozinco Office Poona, 1888

place in the tláuka of Dápoli. The death-rate (10·69 per 1,000), which is nearly the same as that in the táluka of Ratnágiri (10·67) in Khed Táluka was also high. As before noticed, the registration in this Collectorate is very defective and the results arrived at cannot be accepted as correct :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Ratnágiri.	Málvan R. C.	100,953	431·96	254·34	67	2,914	26·50	24·86	13	0·12	5	0·05	350	3·27	187	1·70	31	0·27	989	9·00	1,584	14·41	16·95
	Devgad "	117,899	543·	217·13	121	3,449	29·25	25·05	28	0·24	2	0·02	691	5·86	257	2·18	26	0·22	900	7·63	1,904	16·15	16·18
	Rájápur "	127,899	512·	250·00	174	3,563	27·37	24·92	..	..	2	0·02	1,001	7·82	386	3·02	23	0·18	522	4·08	1,934	15·11	14·89
	Ratnágiri "	113,611	392·97	374·99	149	3,517	30·95	26·08	100	0·88	3	0·03	1,212	10·67	302	2·67	11	0·19	661	5·73	2,291	20·17	17·30
	Sangameshvar "	104,640	557·	187·86	179	2,894	27·66	23·75	..	..	..	..	886	8·47	239	2·23	10	0·10	446	4·26	1,581	15·11	13·06
	Chiplún "	168,921	670·	252·12	212	4,674	27·67	25·30	69	0·41	3	0·02	1,895	11·22	328	1·94	27	0·16	541	3·20	2,863	16·94	16·36
	Khed "	91,492	460·	228·73	146	2,027	22·71	28·57	9	0·10	2	0·02	978	10·68	91	0·99	14	0·15	219	2·39	1,313	14·34	14·02
	Dápoli "	141,012	505·	279·23	247	3,690	26·17	22·62	17	0·12	..	..	1,008	11·40	154	1·09	32	0·23	524	3·72	2,335	16·56	10·36
	Vengurla T.C.	8,947	0·03	298·23	1	343	38·34	33·21	..	..	1	0·11	64	7·15	..	..	3	0·34	173	19·33	246	27·49	24·03
	Ratnágiri "	12,616	0·04	315·400	1	387	30·67	29·01	6	0·47	..	..	109	8·64	26	2·06	2	0·16	140	11·10	283	22·43	18·47
	1887	997,090	3,922·	254·22	1,297	27,998	28·08	..	242	0·24	18	0·02	8,803	8·83	1,971	1·98	190	0·19	5,110	5·12	16,334	16·38	..
	1886 ..					25,077	25·15	..	..	..	29	0·03	9,300	9·34	1,772	1·78	220	0·22	4,473	4·48	15,803	15·85	..
	Mean for 10 years, 1877—1886 ..					18,226	18·12	..	464	0·46	377	0·37	10,188	10·13	1,429	1·42	336	0·33	4,975	4·95	17,826	17·72	..

SOUTHERN REGISTRATION DISTRICT.

COLLECTORATES.

1. Belgaum.
2. Dhárwár.
3. Bijápur.
4. Káuara.

Belgaum.

50. In the Belgaum Collectorate during 1887 cholera was present throughout the Collectorate, except in the tálukás of Belgaum and Sampgaon and the Cantonment of Belgaum, and caused 566 deaths or 0·66 per 1,000, against 1 or 0·00 in 1886. The death-rate (2·15 per 1,000) in the town of Athni was very high. A high death-rate (1·81 per 1,000), which is nearly the same as that in the táluka of Chikodi (1·13), took place in the táluka of Athni. Small-pox caused only 2 deaths, of which 1 was recorded in the táluka of Khánápur and 1 in Chikodi. In 1886 there were 7 deaths or 0·01 per 1,000 recorded from this disease. The general death-rate from fevers for the Collectorate was 13·14 per 1,000 against 12·20 in 1886, but a high death-rate (17·15 per 1,000) took place in the táluka of Khánápur :—

Collectorate.	Registration Circle.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Belgaum.	Belgaum R. C.	95,750	661·55	144·78	199	4,338	45·29	43·73	..	..	..	..	1,391	14·52	512	5·35	31	0·32	362	3·78	2,296	23·97	25·03
	Sampgaon "	119,343	425·	281·98	123	5,310	44·51	43·10	..	..	..	..	1,713	14·30	652	5·44	39	0·33	472	3·94	2,876	24·00	23·51
	Khánápur "	79,284	632·	125·42	119	2,858	36·05	35·29	1	0·01	1	0·01	1,359	17·15	353	4·45	9	0·11	346	4·37	2,069	26·10	30·37
	Chikodi "	245,414	840·	292·40	213	10,836	44·12	40·49	277	1·13	1	..	2,906	11·84	2,003	8·15	89	0·36	2,023	8·24	7,299	29·71	23·05
	Athni "	94,775	786·03	120·57	80	4,520	47·75	41·05	172	1·81	..	..	1,098	11·10	838	8·84	33	0·35	499	5·27	2,600	27·43	19·75
	Gokák "	82,722	670·61	122·35	113	4,384	53·00	49·56	03	0·80	..	..	1,217	14·71	508	6·14	24	0·29	555	6·71	2,379	28·65	22·10
	Parasgad "	91,820	649·	141·48	127	4,663	50·80	45·30	1	0·01	..	..	1,170	12·74	641	6·98	28	0·30	528	5·75	2,868	25·78	21·09
	Belgaum T. C.	23,118	0·45	51,366·67	1	637	27·56	19·66	19	0·82	..	..	251	10·86	79	3·42	5	0·22	190	6·22	514	22·24	18·39
	Cokák "	10,307	0·29	36,428·21	1	451	43·76	37·45	6	0·58	..	..	124	11·93	74	7·18	2	0·19	120	11·64	325	31·53	25·71
	Athni "	11,186	0·92	12,158·70	1	508	53·46	49·26	24	2·15	..	..	113	10·10	126	11·26	0	0·00	40	3·58	312	27·89	23·60
	Belgaum Ct.	9,582	..	..	..	124	12·94	10·07	..	..	..	..	51	5·32	29	3·03	1	0·10	71	7·41	152	15·86	16·07
	1887 ..	864,014	4,457·	185·53	1,077	38,743	44·84	..	566	0·66	2	..	11,352	13·14	5,816	6·73	270	0·31	5,176	5·99	23,181	26·83	...
	1886 ..					35,821	41·46	..	1	..	7	0·01	10,544	12·20	4,352	5·04	217	0·29	4,880	5·65	20,031	23·19	..
	Mean for 10 years, 1877—1886 ..					28,502	31·88	..	2,272	2·54	435	0·49	15,146	16·94	3,729	4·17	350	0·39	8,037	8·99	29,065	32·52	..

N.B.—The area of the Cantonment of Belgaum is included in the town of Belgaum, as it is not separately shown in the Census Report.

Dhárwár.

51. In the Dhárwár Collectorate cholera was present in each rural registration circle, except Hubli and Hángal, and among the urban circles it prevailed in the town of Ránebennur.

The outbreak caused 187 deaths or 0·21 per 1,000; but a high death-rate (3·43 per 1,000) took place in the town of Ránebennur. The death-rates in the tálukás of Ránebennur and Kalghatgi were also high. In the former it was 0·72 per 1,000 and in the latter 0·47. Small-pox prevailed to a slight extent in each táluka except Dhárwár and its petha Mugud, Hubli and Ron. Amongst the town circles it prevailed only in the town of Ránebennur. The general death-rate from small-pox for the Collectorate was 0·06 per 1,000 of population against 0·08 in 1886; but a high death-rate took place in the tálukás of Kod and Hángal, in which it was 0·19 and 0·18 per 1,000 respectively. From fevers the general death-rate for the Collectorate was 16·82 per 1,000 against 16·90 in 1886; but the death-rates (27·44 and 23·03 per 1,000) in the tálukás of Kalghatgi and Hángal respectively were very high. The death-rates in the tálukás of Kod and Bankápur were also very high, in which it was 20·87 and 19·92 per 1,000 respectively :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Dhárwár.	Dhárwár R. C.	83,946	423·5	198·06	127	3,990	47·53	46·28	1	0·01	..	..	1,362	16·22	468	5·57	22	0·26	748	8·91	2,601	30·98	30·16
	Mugud Petha ,,	55,320	309·82	178·56	70	2,784	50·32	50·00	..	..	..	..	968	17·50	403	7·28	9	0·16	226	4·09	1,606	29·03	25·60
	Hubli ,,	87,832	562	156·28	89	4,346	49·48	46·88	6	0·07	5	0·06	1,092	12·43	472	5·37	11	0·12	484	5·51	2,070	23·57	21·41
	Navalgund ,,	83,302	699·72	119·16	99	4,642	55·70	47·20	22	0·26	3	0·04	1,226	14·71	462	5·54	9	0·11	442	5·30	2,164	25·97	24·21
	Nargund Petha ,,	83,216	442	188·27	130	4,105	49·33	47·25	1	0·01	6	0·07	1,304	15·67	408	4·90	32	0·38	407	4·89	2,158	25·93	25·73
	Gadag ,,	76,554	343	223·19	142	3,848	50·26	46·09	30	0·39	4	0·05	1,825	19·02	647	8·45	21	0·27	145	1·90	2,672	34·88	31·66
	Mundargi Petha ,,	60,724	370	164·12	89	3,370	61·57	55·96	14	0·23	..	..	915	15·07	388	6·39	13	0·21	242	3·98	1,572	25·88	25·45
	Karajgi ,,	50,769	279	181·97	105	1,962	38·64	38·49	24	0·47	2	0·04	1,393	27·44	359	7·07	18	0·35	213	4·20	2,009	39·57	38·96
	Bankápur ,,	64,011	401·63	158·39	121	3,123	48·79	43·82	43	0·72	4	0·06	909	15·47	341	5·33	11	0·17	244	3·81	1,548	25·56	21·45
	Ron ,,	60,724	370	164·12	89	3,370	61·57	55·96	14	0·23	..	..	915	15·07	388	6·39	13	0·21	242	3·98	1,572	25·88	25·45
	Kalghatgi ,,	50,769	279	181·97	105	1,962	38·64	38·49	24	0·47	2	0·04	1,393	27·44	359	7·07	18	0·35	213	4·20	2,009	39·57	38·96
	Ranebennur ,,	64,011	401·63	158·39	121	3,123	48·79	43·82	43	0·72	4	0·06	909	15·47	341	5·33	11	0·17	244	3·81	1,548	25·56	21·45
	Kod ,,	89,245	499	200·89	177	3,326	41·46	44·57	8	0·10	15	0·19	1,677	20·87	544	6·77	20	0·25	315	3·92	2,579	32·10	33·65
	Hángal ,,	65,757	290	226·92	162	2,819	42·89	41·06	..	..	12	0·18	1,516	23·03	392	5·96	14	0·21	215	3·27	2,149	32·66	34·40
	Dhárwár T. C.	27,191	1·15	23,644·35	1	1,358	49·76	44·02	..	..	..	..	812	11·47	9	·33	25	·92	449	16·51	795	29·24	29·55
	Hubli ,,	36,677	1·18	31,082·20	1	1,390	37·98	29·77	..	..	..	..	364	9·92	71	1·94	17	·46	182	4·96	601	16·39	17·53
	Gadag-Battigeri ,,	17,002	0·25	69,717·56	1	654	39·94	38·76	..	..	..	..	144	8·47	99	5·82	13	·76	15	·88	271	15·94	19·06
	Ránebennur ,,	10,202	0·37	27,572·97	1	412	40·38	39·40	25	2·43	2	0·20	96	9·41	112	10·98	4	·39	3	·29	262	24·70	26·37
	1887 ..	892,907	4,535	194·68	1,285	42,472	48·10	..	187	0·21	53	0·06	14,851	16·82	5,175	5·86	239	0·27	4,350	4·89	24,835	28·12	..
	1886 ..					40,231	45·60	..	..	..	76	0·08	14,928	16·90	4,792	5·43	272	0·31	4,441	5·03	24,500	27·75	..
	Mean for 10 years, 1877—1886 ..					30,585	33·07	..	1,671	1·81	631	0·68	17,839	19·29	4,733	5·12	363	0·39	6,272	6·78	31,517	34·07	..

N.B.—The births and deaths in pethás are included in their respective tálukás, as the population of the pethás is not shown separately in the Census Report.

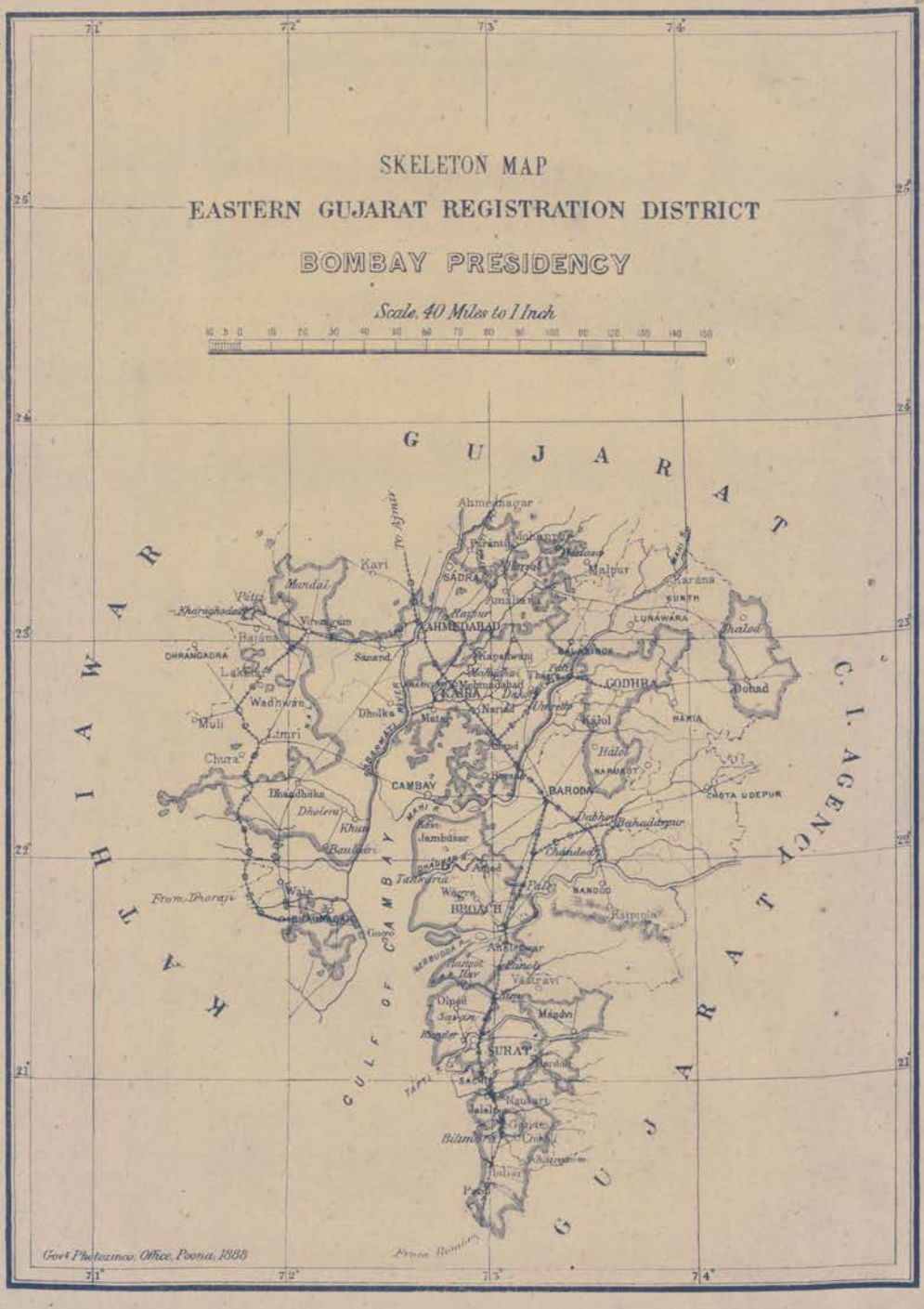
52. In the Bijápur Collectorate during 1887, cholera was present throughout the Collectorate, except the town of Kaládgi, and caused 1,952 deaths or 3·06 per 1,000 of population. In 1886 no deaths from it were recorded. The death-rates in the tálukás of Indi and Sindgi were very high. In the former it was 6·77 per 1,000 and in the latter 4·02. Small-pox prevailed to a slight extent in the tálukás of Hungund, Bijápur and Bádámi, and caused only 5 deaths or 0·01 per 1,000 against 9 or 0·01 in 1886. The general death-rate from fevers for the Collectorate was 16·26 per 1,000 against 12·60 in 1886; but a high death-rate (20·98 per 1,000), which was nearly the same as that in the táluka of Indi (20·67 per 1,000) took place in the táluka of Sindgi :—

Bijápur.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Bijápur.	Hungund, R. C.	89,037	518	154·51	100	4,160	52·09	43·23	300	3·75	2	0·03	1,283	16·07	110	1·37	14	0·17	459	5·73	2,168	27·09	18·61
	Mudebihál ,,	65,024	561	115·29	149	3,516	60·10	46·42	141	2·17	..	..	1,104	16·98	124	1·91	16	0·25	324	4·98	1,709	26·28	16·66
	Sindgi ,,	72,050	812	88·47	141	3,345	56·81	48·07	292	4·02	..	..	1,524	20·98	236	3·25	22	0·30	361	4·96	2,437	33·54	24·67
	Bágevádi ,,	86,743	704	123·24	124	4,275	49·25	42·09	296	3·40	..	..	1,599	18·43	310	3·57	18	0·21	516	5·95	2,538	29·11	17·93
	Bijápur ,,	65,472	868·87	75·39	91	3,145	53·62	50·74	202	3·09	2	0·03	1,060	16·20	289	4·41	15	0·23	267	4·08	1,775	27·11	17·90
	Badámi ,,	55,152	652·58	84·52	162	4,[illegible]	49·34	42·40	74	0·83	..	..	1,248	14·00	410	4·70	28	0·31	625	7·00	2,384	27·73	18·69
	Ballkot ,,	89,047	676	131·73	155	4,179	46·91	38·70	146	1·64	1	0·01	1,170	13·24	382	4·29	27	0·30	277	3·11	2,012	22·59	18·56
	Indi ,,	71,940	871	82·59	121	4,220	60·85	58·07	487	6·77	..	..	1,487	20·67	219	3·04	21	0·29	395	5·49	2,607	36·24	20·77
	Bijápur, T. C.	11,424	2·13	5,364·78	1	602	52·70	26·26	15	1·31	..	..	188	16·46	55	13·39	12	1·05	10	·88	278	33·09	14·09
	Kaládgi ,,	7,024	0·12	58,533·33	1	118	16·79	18·85	..	..	..	..	71	10·11	27	3·27	..	..	12	1·37	119	16·94	8·68
	1887 ..	638,403	5,797	110·20	1,141	33,147	51·91	..	1,952	3·06	5	0·01	10,385	16·26	2,279	3·57	173	0·27	3,145	4·92	17,337	28·09	..
	1886 ..					27,152	42·57	..	..	..	9	0·01	8,043	12·60	1,[illegible]	2·35	167	0·26	2,426	3·80	12,150	19·02	..
	Mean for 10 years, 1877—1886 ..					17,718	24·97	..	1,259	1·77	334	0·47	13,739	19·36	1,[illegible]661	2·34	297	0·42	5,191	7·20	12	31·60	..

SKELETON MAP
EASTERN GUJARAT REGISTRATION DISTRICT
BOMBAY PRESIDENCY

Scale. 40 Miles to 1 Inch.



53. In the Kánara Collectorate during 1887 there were only three deaths from cholera reported, of which one occurred in the Táluka of Kumta, and two were registered in Sirsi Táluka. The general death-rate for the Collectorate was 0·01 per 1,000 of population against none in 1886. Small-pox caused only two deaths during the year, of which one took place in the táluka of Honávar and one was recorded in Siddápur Táluka. The general death-rate from fevers for the Collectorate was 15·57 per 1,000 of population against 17·33 in 1886, but a high death-rate (27·37 per 1,000) took place in the Mundgod Petha. The death-rate (19·88 per 1,000) which was nearly the same as that in the táluka of Yellápur (19·81 per 1,000) in the táluka of Haliyál and its pètha Supa was high :—

Kánara.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 10,00 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Kánara.	Kárwár R.C....	33,981	269·23	126·22	51	1,269	37·34	35·05	...	...	...	...	432	12·71	15	0·44	17	0·50	319	9·39	783	23·04	24·40
	Kumta „ ...	48,129	222·65	216·16	110	1,879	39·04	36·40	1	0·02	...	...	510	10·60	116	2·41	35	0·73	566	11·76	1,228	25·52	27·80
	Akola Petha „ ...	34,189	367	93·16	88	1,234	35·89	36·09	...	...	...	...	561	16·41	15	0·44	17	0·50	311	9·09	904	26·44	27·20
	Honávar „ ...	54,199	446	191·98	99	2,133	39·35	39·30	...	...	1	...	643	11·86	94	1·73	34	0·62	527	9·72	1,299	23·93	26·99
	Bhatkal Petha „ ...	31,426			31	935	29·78	32·45	...	...	...	...	314	9·99	50	1·59	14	0·45	292	9·29	670	21·32	22·08
	Sirsi „ ...	62,490	779	80·10	258	1,581	25·34	24·31	2	0·03	...	...	1,152	18·46	78	1·17	29	0·47	675	10·82	1,031	30·95	32·39
	Siddápur „ ...	36,658	239	149·20	93	1,143	32·06	29·73	...	...	1	0,03	637	17·62	60	1·68	25	0·70	332	9·31	1,025	28·74	30·60
	Yellápur „ ...	18,639	589	61·65	78	466	25·01	21·63	...	...	...	...	369	19·81	13	0·69	8	0·43	168	9·02	558	29·95	31·23
	Mundgod Petha „ ...	17,685			75	485	27·42	25·28	...	...	...	...	484	27·37	44	2·49	5	0·28	144	8·14	677	38·28	40·77
	Haliyál „ ...	61,154	980	62·40	210	1,422	23·25	23·04	...	...	...	...	1,216	19·88	123	2·01	21	0·34	343	5·61	1,763	27·84	30·91
	Supa Petha „ ...																						
	Kárwár T. C.	13,761	11·77	1,169·16	1	462	33·57	32·63	...	...	...	...	139	10·10	1	·07	11	0·80	130	9·45	281	20·42	20·57
	Kumta „ ...	10,029	7·35	1,446·12	1	372	35·00	35·19	...	...	...	...	144	13·55	20	1·88	4	0·38	127	11·95	295	27·75	23·89
	1887 ...	421,840	3,911	107·85	1,109	13,372	31·70	...	3	0·01	2	...	6,571	15·57	624	1·48	220	0·52	3,934	9·33	11,354	26·91	...
	1886 ...					12,089	30·70	...	...	...	78	0·18	7,310	17·23	748	1·77	212	0·50	3,774	8·95	12,122	28·73	...
	Mean for 10 years, 1877—1886 ...					11,985	29·66	...	333	0·81	240	0·58	7,064	19·31	1,048	2·54	225	0·55	3,788	9·18	13,098	32·97	...

N.B.—As the population of Supa Petha is included in the Haliyál Táluka in the Census Report, the births and deaths are included in it. The area, in square miles, of pethás are included in their respective tálukás, as they are not separately shown in the Census Report.

EASTERN GUJARA'T REGISTRATION DISTRICT.

COLLECTORATES.

1. Surat.
2. Broach.
3. Kaira.
4. Panch Mahále.
5. Ahmedabad.

54. In the Surat Collectorate during 1887 cholera was present throughout the Collectorate, except in the táluka of Olpád. The outbreak caused 834 deaths or 1·35 per 1,000 against 1 or 0·00 in 1886. In the táluka of Balsár the death-rate (4·18 per 1,000) which was nearly the same as that in the town of Balsár (4·61) was very high. The death-rates (2·08 and 2·82 per 1,000) in the tálukás of Chikhli and Párdi respectively were also high. Small-pox caused 117 deaths against 12 in 1886. It prevailed throughout the Collectorate, except the táluka of Chorási and the town of Surat, in which no deaths were recorded from this cause. The general death-rate from small-pox for the Collectorate was 0·19 per 1,000 against 0·02 in 1886; but a high death-rate took place in the tálukás of Balsár and Olpád. In the former it was 0·52 per 1,000 and in the latter 0·46. The death-rates (0·31 and 0·30 per 1,000) in the táluka of Jalálpor and in the town of Balsár respectively were also high. The general death-rate from fevers for the Collectorate was 21·58 per 1,000 of population against 20·48 in 1886, but a high death-rate (27·85 per 1,000) which was nearly the same as that in the táluka of Bárdoli (27·16) took place in Mándvi Táluka. In the táluka of Balsár the death-rate (24·02) per 1,000) was also high :—

Surat.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Surat.	Olpád R. C. ...	62,049	322	192·10	120	2,965	47·78	46·37	...	...	29	0·46	1,334	21·50	418	6·74	30	0·48	282	4·54	2,003	33·73	23·32
	Mándvi " ...	50,810	280	181·46	141	2,175	42·80	42·75	40	0·79	2	0·04	1,413	27·85	34	0·67	33	0·65	48	0·94	1,572	30·94	25·88
	Chorási " ...	44,764	107	418·35	68	1,923	42·96	41·39	58	1·30	...	...	889	19·86	270	6·03	22	0·49	270	6·03	1,500	33·51	28·59
	Bárdoli " ...	70,100	222	342·79	124	3,553	46·75	43·99	45	0·59	13	0·17	2,067	27·16	158	2·08	25	0·33	59	0·78	2,367	31·10	27·66
	Jalálpor " ...	74,016	189	391·62	91	3,344	45·18	40·48	11	0·15	23	0·31	1,351	20·95	479	6·47	32	0·43	31	0·42	2,127	28·74	29·00
	Chikhli " ...	60,147	167	360·16	62	2,683	44·61	42·05	125	2·08	7	0·12	1,289	21·43	139	2·31	20	0·33	124	2·06	1,706	28·36	26·03
	Balsár " ...	67,478	205·50	328·36	94	3,060	45·35	43·15	282	4·18	35	0·52	1,621	24·02	228	3·38	32	0·47	117	1·73	2,315	34·31	28·80
	Párdi " ...	55,761	163	342·09	82	2,246	40·16	36·87	157	2·82	4	0·07	914	16·39	172	3·08	24	0·43	145	2·60	1,416	25·39	21·25
	Surat T. C. ...	109,844	3	36,614·66	1	3,688	32·66	34·03	51	0·50	...	...	2,102	19·13	144	1·31	28	·25	802	7·34	3,191	29·05	25·36
	Balsár " ...	13,229	2·50	5,291·60	1	205	15·49	18·75	61	4·61	4	·30	84	6·34	25	1·88	6	·45	43	3·25	223	16·85	12·70
	1887 ...	614,198	1,662	369·55	782	25,787	41·90	...	834	1·35	117	0·19	13,257	21·58	2,067	3·36	252	0·41	1,983	3·23	18,510	30·13	...
	1886 ...					24,795	40·37	..	1	...	12	0·02	12,580	20·48	1,789	2·92	285	0·46	1,519	2·47	16,186	26·35	...
	Mean for 10 years, 1877—1886 ...					19,336	31·63	...	747	1·22	380	0·62	12,395	20·27	1,590	2·62	270	0·44	1·097	2·63	16,908	27·80	...

55. In the Broach Collectorate during 1887 cholera was present throughout the Collectorate and caused 311 deaths or 0·95 per 1,000 against 2 or 0·01 in 1886. The death-rate from this outbreak (3·03 per 1,000) in the town of Broach was very high. A high death-rate (1·95 per 1,000) also took place in the táluka of Broach. Small-pox prevailed to a slight extent throughout the Collectorate, except in the town of Jambusar, and caused 47 deaths against 11 in 1886. The general death-rate from this cause for the Collectorate was 0·14 per 1,000; but a high death-rate took place in the tálukás of A'mod and Jambusar, in which it was 0·30 and 0·24 per 1,000 respectively. From fevers the general death-rate for the Collectorate was 33·39 per 1,000 against 26·08 in 1886; but a high death-rate took place in the tálukás of Vágra and Broach. In the former the death-rate was 41·65 per 1,000 and in the latter 38·69. The death-rate (37·69 per 1,000) in the táluka of A'mod was also high :—

Broach.

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Broach.	Broach R.C....	78,250	300·32	244·01	104	2,723	37·16	41·55	143	1·95	1	0·01	2,835	38·69	96	1·31	20	0·27	161	2·20	3,256	44·43	31·13
	Vágra " ...	33,902	308	110·07	69	1,340	39·53	44·95	4	0·12	1	0·03	1,412	41·65	19	0·56	13	0·38	46	1·36	1,495	44·10	32·50
	A'mod " ...	39,841	176	225·23	48	1,403	35·20	39·58	22	0·55	12	0·30	1,494	37·60	27	0·68	14	0·35	102	2·57	1,671	42·16	30·30
	Jambusar " ...	66,293	372·48	177·99	82	2,051	30·95	42·30	5	0·08	16	0·24	2,287	34·50	34	0·51	26	0·39	159	2·40	2,527	38·12	30·77
	Anklesvar " ... / Hánsot Petha " ...	66,054	294	221·27	100	2,859	43·95	40·38	19	0·29	14	0·21	1,895	29·13	56	0·86	24	0·37	247	3·80	2,249	34·57	27·52
	Broach T. C. ...	37,281	1·68	22,191·67	1	1,073	28·78	28·62	113	3·03	3	0·08	808	21·67	18	·48	18	·48	227	6·03	1,185	31·78	22·74
	Jambusar	11,479	0·54	21,257·47	1	497	43·30	45·91	11	·96	...	...	185	16·12	30	2·61	6	·52	209	26·04	531	46·26	39·12
	1887 ...	326,930	1,453	225·00	405	12,546	38·37	...	311	0·95	47	0·14	10,916	33·39	280	·85	121	0·37	1,239	3·79	12,014	39·50	...
	1886 ...					13,175	40·30	...	2	0·01	11	0·03	8,527	26·08	535	1·63	115	0·35	525	1·61	9,715	29·71	...
	Mean for 16 years, 1877—1886 ...					9,060	27·05	...	238	0·71	135	0·40	9,094	27·04	620	1·84	126	0·38	648	1·93	10,861	32·30	...

N.B.—The births and deaths in Hánsot Petha are included in Anklesvar Táluka, as the population of each is not separately shown in the Census Report.

56. In the Kaira Collectorate during 1887 cholera was present throughout the Collectorate, except the tálukás of Borsad and Kapadvanj. The outbreak caused 281 deaths or 0·34 per 1,000. In 1886 there was only one death recorded from this cause. The death-rate (1·96 per 1,000) from cholera in the táluka of Thásra was very high.

Kaira.

From small-pox no deaths were recorded throughout the year. In 1886 there were registered six deaths or 0·01 per 1,000. The general death-rate from fevers for the Collectorate was 25·52 per 1,000 against 20·62 in 1886; but a very high death-rate (32·17 per 1,000) took place in the táluka of Mátar. In the táluka of Thásra the death-rate (29·56) was also high. The death-rate (27·79 per 1,000), which was nearly the same as that in the town of Kapadvanj (27·42) in Nadiád Táluka, was a high one :—

	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Collectorate.																							
Kaira	Mehmadabad R. C. ...	78,296	173·72	439·19	59	2,769	36·29	37·81	3	0·04	..	..	2,048	26·77	156	2·05	36	0·47	271	3·55	2,509	32·88	25·63
	Nadiád ,, ...	133,952	223·67	598·88	92	5,190	39·74	37·69	10	0·07	..	..	3,722	27·79	97	0·73	62	0·46	585	4·37	4,476	33·42	24·01
	Borsad ,, ...	131,093	217·81	601·87	89	5,131	43·72	42·49	..	..	..	..	2,911	22·20	291	2·22	66	0·50	409	3·12	3,677	28·04	28·80
	Anand ,, ...	154,118	243·	634·23	74	6,261	40·62	38·45	6	0·04	..	..	3,344	21·69	31	0·52	79	0·51	818	5·31	4,328	28·07	25·08
	Thásra ,, ...	84,866	253·	335·44	97	3,738	38·15	38·47	166	1·96	..	..	2,509	29·56	99	1·17	45	0·53	221	2·60	3,040	35·82	23·77
	Kapadvanj ,, ...	78,582	278·77	280·88	85	2,730	34·74	37·09	..	..	..	..	1,838	23·39	96	1·22	24	0·31	193	2·46	2,151	27·38	18·83
	Mátar ,, ...	78,679	217·	360·73	81	2,898	36·83	37·71	70	0·89	..	..	2,531	32·17	97	1·23	39	0·49	135	1·72	2,872	36·50	26·72
	Kaira T. C. ...	12,640	0·28	45,142·86	1	327	25·87	30·30	11	0·87	..	..	341	26·97	18	1·42	5	·39	110	8·70	485	38·37	22·46
	Nadiád ,, ...	22,304	0·33	85,769·70	1	1,045	27·03	32·67	1	0·03	..	..	677	23·91	23	·81	9	·28	305	10·77	1,014	35·82	30·07
	Borsád ,, ...	13,228	0·19	64,357·89	1	346	28·29	28·05	3	0·24	..	..	231	18·89	3	·24	6	·49	14	1·14	257	21·01	19·63
	Kapadvanj ,, ...	14,442	0·23	62,791·30	1	392	27·14	27·84	11	0·76	..	..	396	27·42	14	·96	3	·20	41	2·83	465	32·19	29·29
	1887 ...	804,803	1,609	500·18	581	30,930	38·43	..	281	0·34	..	..	20,543	25·52	975	1·21	373	0·47	3,102	3·85	25,274	31·40	..
	1886 ...					30,643	38·08	..	1	..	6	0·01	16,597	20·62	2,424	3·01	333	0·42	832	1·03	20,193	25·09	..
	Mean for 10 years, 1877—1886 ..					25,519	32·01	..	534	0·42	148	0·19	19,274	24·21	2,243	2·81	340	0·43	1,076	1·35	23,415	29·42	..

57. In the Panch Mahál's Collectorate cholera was present during the year in the tálukás of Kálol and Hálol. Among the town circles there was only one death from this cause in the town of Godhra. The outbreak caused 59 deaths or 0·23 per 1,000. In 1886 no deaths were recorded from this cause. Small-pox prevailed to a slight extent and caused only 13 deaths against 30 in 1886. The general death-rate from this cause for the Collectorate was 0·05 per 1,000 against 0·12 in 1886. The death-rate (0·24 per 1,000) in the town of Dohad was high. From fevers the general death-rate for the Collectorate was 27·12 per 1,000 against 20·10 in 1886, but a high death-rate (30·34 per 1,000), which is nearly the same as that in the táluka of Kálol (30·28), took place in the táluka of Hálol. In the town of Dohad the death-rate (29·36) was also high :—

Panch Mahál's.

	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Collectorate.																							
Panch Mahál's.	Godhra R. C. ...	64,976	597·83	108·69	232	2,680	41·24	38·41	...	...	...	...	1,657	25·50	20	0·31	27	0·42	26	0·40	1,730	26·63	18·01
	Dodhad ,, ...	47,219	599·23	147·12	120	1,714	36·30	33·91	...	...	8	0·17	1,266	26·81	5	0·11	18	0·38	15	0·32	1,312	27·79	21·20
	Jhálod ,, ...	41,026			99	1,492	36·37	34·64	...	...	2	0·05	1,118	27·25	2	0·05	12	0·29	8	0·19	1,142	27·83	22·84
	Kálol ,, ...	43,269	415·	164·39	68	1,483	31·27	33·70	26	0·60	...	...	1,310	30·28	17	0·39	26	0·60	58	1·34	1,437	33·21	24·31
	Hálol ,, ...	33,253			156	1,123	33·77	37·02	32	0·96	...	...	1,009	30·34	8	0·24	14	0·42	33	0·99	1,096	32·96	22·51
	Godhra T. C. ...	13,342	0·17	78,482·35	1	268	20·09	17·16	1	0·07	...	...	205	15·36	13	·97	5	·37	21	1·57	245	18·35	14·69
	Dohad ,, ...	12,894	0·17	72,905·88	1	284	22·91	25·90	...	...	3	0·24	364	29·36	6	·48	7	·56	6	0·48	386	31·14	27·27
	1887 ...	255,479	1,612	158·38	675	9,044	35·40	...	59	0·23	13	0·05	6,929	27·12	71	·27	109	0·43	167	0·65	7,348	28·76	...
	1886 ...					8,757	34·28	...	...	...	30	0·12	5,137	20·10	109	0·43	133	0·44	92	0·36	5,481	21·45	...
	Mean for 10 years, 1877—1886 ...					6,987	27·99	...	471	1·89	42	0·17	4,512	18·08	307	1·23	115	0·46	335	1·34	5,782	23·17	...

N.B.—The area in square miles of Dohad and Jhálod Tálukás is shown together, as well as Kálol and Hálol Tálukás, in the Census Report.

Ahmedabad.

58. In the Ahmedabad Collectorate during 1887 cholera was present throughout the Collectorate, except the tálukás of Gogha, Dhandhuka and Viramgám and the towns of Gogha and Viramgám. The outbreak caused 140 deaths or 0·16 per 1,000 of population against 6 or 0·01 in 1886. Small-pox prevailed only in the town of Dholka where it caused 9 deaths. The general death-rate from this cause for the Collectorate was 0·01 per 1,000 against none in 1886. The general death-rate from fevers for the Collectorate was 23·58 per 1,000 against 20·76 in 1886, but a high death-rate (32·91 per 1,000) took place in the town of Viramgám. The death-rates (28·63 per 1000) in the táluka of Dholka was also high :—

Collectorate.	Registration Circles.		Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Ahmedabad.	Daskroi	B. C.	143,942	345·80	416·26	137	4,855	33·73	34·27	20	0·14	..	..	3,591	24·95	68	0·47	66	0·46	92	0·64	3,837	26·65	218·0
	Gogha	,,	22,807	223·25	99·92	63	1,162	52·09	62·34	..	..	..	..	470	21·07	115	5·16	12	0·54	78	3·49	675	30·26	273·0
	Dhandhuka	,,	123,107	1,098·	112·12	140	4,851	39·45	43·44	..	..	..	..	1,904	15·43	728	5·91	34	0·28	657	5·34	3,319	26·96	23·85
	Sánand	,,	76,964	360·	213·79	85	2,295	31·12	33·91	22	0·28	..	..	1,947	25·29	47	0·61	36	0·47	40	0·52	2,092	27·16	21·24
	Viramgám	,,	117,584	676·39	173·84	155	4,776	40·62	44·70	..	..	..	..	2,966	25·22	56	0·48	23	0·20	211	1·79	3,256	27·69	26·22
	Parántij	,,	107,554	449·	239·54	161	3,752	34·88	34·21	45	0·42	..	..	2,246	20·88	73	0·68	33	0·31	112	1·04	2,509	23·33	20·26
	Dholka	,,	93,476	664·25	140·72	117	3,470	37·12	37·84	1	0·01	..	..	2,676	28·63	94	1·01	46	0·51	173	1·87	2,994	32·03	26·42
	Ahmedabad	T. C.	124,767	2·20	56,712·27	1	4,008	36·91	38·86	42	·34	..	..	3,276	26·26	48	·38	10	·08	1,293	10·12	4,669	37·18	36·27
	Gogha	,,	7,063	0·75	9,417·33	1	307	43·46	37·52	..	..	..	..	82	11·60	16	2·26	1	·14	41	5·80	140	19·82	29·87
	Viramgám	,,	18,990	0·61	31,131·15	1	728	38·34	41·44	..	..	..	..	625	32·91	72	3·79	5	·26	187	9·85	889	46·81	45·13
	Dholka	,,	17,716	0·75	23,621·33	1	732	41·32	44·48	8	0·45	9	0·50	374	21·11	32	1·80	14	·79	184	10·38	621	35·05	22·97
	Ahmedabad Cantonment	Ct.	1,940	..	..	..	27	13·92	35·05	2	1·03	..	..	35	18·04	..	..	..	..	..	..	37	19·07	14·95
	Europeans and Eurasians and fighting men in the Cantonment..		914	..	..	.	..	..	..	..	..	..	..	..	..	.	...	..	..	..	..	..	..	..
	1887 .		856,324	3,821	224·10	862	31,060	36·77	..	140	0·16	9	0·01	20,188	23·58	1,349	1·57	282	0·33	3,040	3·55	25,008	29·20	..
	1886 ..						33,287	38·91	..	6	0·01	..	..	17,776	20·76	1,890	2·21	260	0·30	2,150	2·51	22,082	25·79	..
	Mean for 10 years, 1877—1886 ..						23,893	28·15	..	465	0·55	168	0·20	19,511	23·08	1,562	1·85	230	0·27	3,055	3·61	24,991	29·55	..

SIND REGISTRATION DISTRICT.

COLLECTORATES.

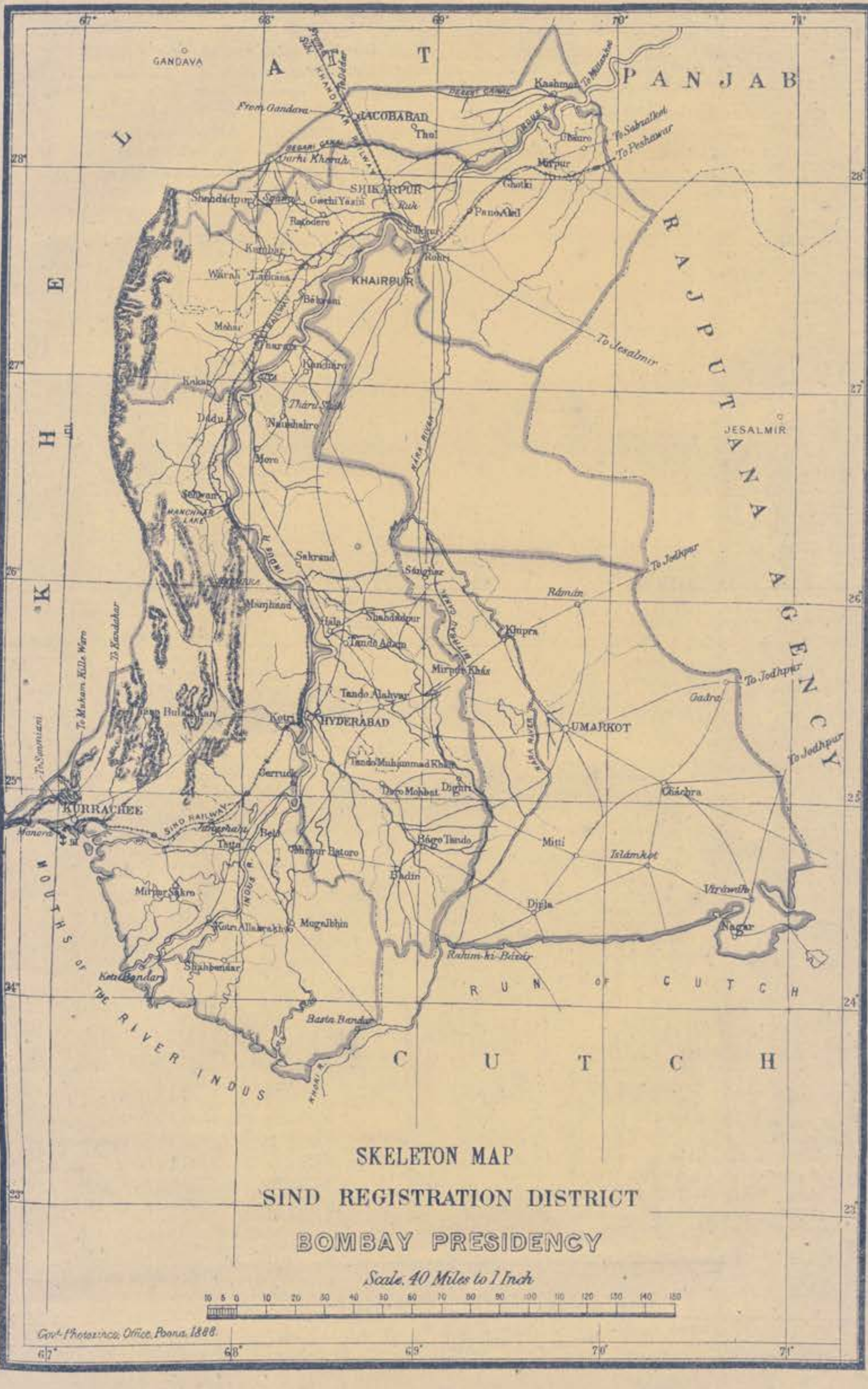
1. Karáchi.
2. Hyderabad.
3. Thar and Párkar.
4. Shikárpur.
5. Upper Sind Frontier.

Karáchi.

59. In the Karáchi Collectorate during 1887 no deaths were recorded from cholera. Small-pox caused only 2 deaths or 0·03 per 1,000 in the town of Karáchi. The general death-rate from fevers for the Collectorate was 13·31 per 1000 of population against 14·04 in 1886, but a high death-rate took place in the tálukás of Mirpur Batoro and Ghorabari in which it was 17·18 and 17·05 per 1,000 respectively. The death-rates (15·53 and 14·19 per 1000) in the town of Karáchi and in the táluka of Tatta respectively were also high :—

Collectorate.	Registration Circles.		Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Deaths. Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Karáchi.	Karáchi	B. C.	20,256	1,284·34	15·77		372	18·31	19·07	..	..	..	..	111	5·48	1	0·05	8	0·39	16	0·79	136	6·71	7·26
	Kohistan	,,	11,957	2,652·	4·51		152	12·71	10·62	..	..	..	..	70	5·85	..	..	7	0·59	24	1·67	97	8·11	8·45
	Dádu	,,	} 121,138	1,686·	71·85		3,684	30·41	28·23	..	..	..	..	1,650	13·62	55	0·45	84	0·69	191	1·58	1,980	16·34	18·63
	Johi	,,																						
	Sehwan	,,																						
	Mánjhand	,,	18,052	581·	32·62		528	28·39	27·23	..	..	..	..	261	13·77	2	0·11	6	0·32	27	1·42	296	15·62	19·47
	Kotri	,,	24,870	839·	29·64		527	21·19	22·40	..	..	..	..	294	11·82	1	0·04	14	0·57	32	1·29	341	13·71	19·98
	Tatta	,,	39,750	1,323·	30·05		802	20·18	16·43	..	..	..	..	564	14·19	5	0·13	29	0·73	76	1·91	674	16·96	20·33
	Sákro	,,	21,711	1,108·	19·59		402	18·52	19·34	..	..	..	..	237	10·92	3	0·14	16	0·74	8	0·37	264	12·16	15·61
	Ghorabari	,,	34,360	566·	60·70		747	21·74	22·4	..	..	..	..	586	17·05	4	0·12	29	0·84	85	2·42	702	20·43	17·03
	Mirpur Batoro	,,	32,179	268·	120·07		904	28·09	30·52	..	..	..	..	553	17·18	6	0·19	13	0·40	71	2·21	647	19·99	19·05
	Sujawal	,,	30,314	267·	113·53		884	29·02	31·60	..	..	..	..	362	11·94	2	0·07	21	0·69	71	2·34	456	15·04	15·07
	Jati	,,	27,035	2,145·	12·61		706	26·09	9·24	..	..	..	..	321	11·86	4	0·15	14	0·52	6	0·22	345	12·75	8·39
	Shahbandar	,,	27,814	1,388·	20·04		538	19·23	16·68	..	..	..	..	301	10·82	..	..	15	0·54	1	0·01	317	11·40	12·15
	Karáchi	T. C.	68,332	7·66	8920·63	1	3,090	45·00	48·89	..	..	2	0·03	1,061	15·53	161	2·36	85	0·51	76	11·24	1,027	15·04	23·73
	1887 ..		4,78,688	14,115·	33·91	723	13,949	29·12	..	..	..	2	..	6,371	13·31	244	0·51	291	0·61	1,376	2·88	8,279	17·29	..
	1886 .						12,659	26·45	..	..	..	7	0·01	6,721	14·04	206	0·43	311	0·65	1,455	3·04	8,701	18·17	..
	Mean for 10 years, 1877—1886 ..						7,954	17·42	..	625	1·37	116	0·25	5,880	12·88	172	0·38	276	0·60	1,202	2·63	8,271	18·11	..

N.B.—The táluka "Johi" is composed of some villages from Dádu and Sehwan Tálukás (*Vide* page 1107 of the *Bombay Government Gazette* dated 27th November 1884). As the population and area according to the Census of 1881 are not obtainable for each of these tálukás, the births and deaths in Dádu, Johi and Sehwan Tálukás are shown together.


SKELETON MAP
SIND REGISTRATION DISTRICT
BOMBAY PRESIDENCY
Scale. 40 Miles to 1 Inch
Govt. Photozinco. Office, Poona, 1888.
PANJAB
RAJPUTANA AGENCY
KHELAT
CUTCH
RUN OF CUTCH
MOUTHS OF THE RIVER INDUS
GANDAVA
JESALMIR
JACOBABAD
SHIKARPUR
KHAIRPUR
HYDERABAD
UMARKOT
KURRACHEE
Sukkur
Rohri
Kotri
Tatta
Sehwan
Dadu
Larkana
Mehar
Naushahro
Sakrand
Sanghar
Hala
Tando Adam
Tando Alahyar
Tando Muhammad Khan
Mirpur Khas
Badin
Mitti
Islamkot
Nagar
Ghorabari
Shahbandar
Keti Bandar
Manora
To Jesalmir
To Jodhpur
To Peshawar
To Kandahar
SIND RAILWAY
INDUS R.
NARA RIVER
MANCHHAR LAKE

Hyderabad.

60. In the Hyderabad Collectorate no deaths were recorded from cholera during 1887. Small-pox prevailed to a slight extent in the tálukás of Hála, Kandiaro and Naushahro and in the town of Hyderabad. The death-rate from this cause for the Collectorate was 0·06 per 1000 against 0·10 in 1886, but a high death-rate took place in the tálukás of Kandiáro and Naushahro in which it was 0·50 and 0·38 per 1,000 respectively. The general death-rate from fevers for the Collectorate was 14·55 per 1,000 against 17·60 in 1886; but a high death-rate (24·23 and 21·50 per 1,000) took place in the tálukás of Kandiaro and Naushahro respectively. The death-rates in the tálukás of Sákrand and Moro were also high; in the former it was 20·10 per 1,000 and in the latter 18·88 :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Hyderabad.	Hyderabad R. C.	67,880	404	143·14	Information not available in the Census Report.	1,201	21·81	22·46	..	..	..	..	529	9·15	16	0·28	22	0·38	20	0·35	587	10·17	13·48
	Guni ,,	71,162	989	71·95		1,540	21·64	23·26	..	..	..	..	1,059	14·88	14	0·20	35	0·49	28	0·39	1,136	15·96	20·71
	Badin ,,	65,708	795	82·65		765	11·64	10·61	..	..	..	..	636	9·68	2	0·03	29	0·44	11	0·17	678	10·23	9·52
	Tando Bago ,,	55,473	709	78·24		504	9·09	10·71	..	..	..	..	456	8·11	2	0·04	27	0·48	20	0·36	499	8·10	10·69
	Dero Mohbat ,,	37,260	670	55·61		803	21·55	24·74	..	..	..	..	413	11·08	3	0·08	15	0·40	65	1·74	496	13·31	17·04
	Hála ,,	78,149	531	147·17		1,722	22·03	17·70	..	..	1	0·01	770	9·85	7	0·09	21	0·27	31	0·40	830	10·62	15·83
	Tando Alahyar ,,	66,126	697	94·87		2,052	31·02	24·83	..	..	..	..	1,056	15·97	6	0·09	24	0·36	24	0·36	1,110	16·79	26·53
	Shahdádpur ,,	55,593	733	75·84		1,291	23·22	24·61	..	..	..	..	915	16·46	6	0·10	28	0·50	16	0·29	965	17·36	26·26
	Mirpur Khás ,,	24,979	561	44·53		351	14·05	17·85	..	..	..	..	258	10·33	..	..	12	0·48	..	..	270	10·80	15·77
	Kandiáro ,,	39,336	315	124·87		1,939	49·29	41·97	..	..	20	0·50	953	24·23	23	0·58	27	0·69	21	0·53	1,044	26·54	23·60
	Naushahro ,,	61,295	532	115·22		3,055	49·84	53·02	..	..	23	0·38	1,318	21·50	13	0·21	35	0·57	34	0·55	1,428	23·22	23·54
	Moro ,,	44,443	704	63·13		1,788	40·23	30·48	..	..	..	..	839	18·88	2	0·05	24	0·54	15	0·34	880	19·80	21·69
	Sákrand ,,	52,075	1,390	37·46		1,896	36·40	33·03	..	..	.	..	1,047	20·10	..	..	30	0·58	4	0·08	1,081	20·76	23·25
	Hyderabad T. C.	45,195	..	..	1	1,321	29·24	34·05	..	..	2	0·04	740	16·37	..	..	22	0·49	214	4·74	978	21·64	21·43
	1887 ..	7,54,624	9,030	83·57	1,105	20,788	27·55	..	..	..	46	0·06	10,977	14·55	94	0·12	351	0·47	503	0·67	11,971	15·86	..
	1886 ..					19,966	26·46	..	..	..	79	0·10	13,261	17·60	104	0·14	452	0·57	703	0·93	14,599	19·34	..
	Mean for 10 years, 1877—1886 ..					9,868	13·31	..	464	0·63	213	0·29	9,065	12·22	90	0·12	455	0·61	628	0·85	10,915	14·72	..

N.B.—The area in square miles of the town of Hyderabad is included in the Hyderabad Táluka, as it is not separately shown in the Census Report.

Thar and Párkar.

61. In the Thar and Párkar Collectorate no deaths from cholera were recorded during 1887. In 1886 there were also no deaths recorded from it. Small-pox prevailed to a slight extent in the tálukás of Nagar and Mitti. The death-rate from this cause for the Collectorate was 0·03 per 1,000 against none in 1886, but a high death-rate (0·27 per 1,000) took place in the táluka of Mitti. The general death-rate from fevers for the Collectorate was 15·31 per 1,000 of population, but a high death-rate took place in the táluka of Mitti and in the town of Umarkot. In the former it was 20·96 per 1,000 and in the latter 18·39. The death-rate (17·73 per 1,000), which is nearly the same as that in the táluka of Dipla (17·24) in Nagar Táluka, was also high :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Thar and Párkar.	Umarkot R. C.	38,807	1,107	62·52	Information not available in the Census Report.	917	23·63	23·27	..	..	..	..	486	12·52	1	0·03	13	0·33	9	0·23	500	13·12	13·40
	Chachra ,, ..	37,046				1,909	51·53	41·65	..	..	..	..	545	14·71	7	0·19	26	0·70	24	0·65	602	16·25	16·09
	Nagar ,, ..	37,812				1,601	42·33	51·82	..	..	1	0·03	665	17·73	1	0·03	21	0·56	7	0·19	695	18·53	14·64
	Mitti ,, ..	22,611	8,503	9·08		1,410	62·36	56·52	..	..	6	0·27	474	20·96	4	0·18	21	0·93	30	1·33	535	23·66	18·04
	Dipla ,, ..	17,114				721	42·13	44·82	..	..	..	..	295	17·24	..	..	9	0·53	14	0·82	318	18·58	17·64
	Khipra ,, ..	26,079	3,114	15·23		633	24·27	26·60	..	..	..	..	346	13·27	..	..	10	0·38	39	1·50	395	15·15	22·12
	Sanghar ,, ..	27,847				415	19·44	27·36	..	..	..	..	251	11·76	..	..	10	0·47	13	0·61	274	12·84	11·61
	Umarkot T. C.	2,828	..	..	1	64	22·63	24·04	..	..	..	..	52	18·39	..	..	..	..	7	2·48	59	20·86	22·63
	1887 ..	2,03,344	12,729	15·98	73	7,670	37·72	..	..	..	7	0·03	3,114	15·31	13	0·06	110	0·54	143	0·70	3,387	16·66	..
	1886 ..					7,783	38·27	..	..	..	..	..	2,990	14·70	30	0·15	111	0·55	138	0·67	3,269	16·07	..
	Mean for 10 years, 1877—1886 ..					4,883	25·13	..	23	0·12	12	0·06	2,771	14·26	24	0·13	89	0·46	157	0·81	3,076	15·83	..

N.B.—The area of the town of Umarkot is included in the Umarkot Táluka, as it is not separately shown in the Census Report.

Shikárpur.

62. In the Shikárpur Collectorate during 1887 cholera was present in the tálukás of Sukkur and Kambar and in the towns of Sukkur and Lárkhána and caused 201 deaths. In 1886 no deaths were recorded from this cause. The general death-rate from cholera for the Collectorate was 0·24 per 1,000; but a very high death-rate (3·50 per 1,000) took place in the town of Sukkur. Small-pox was epidemic in this Collectorate and prevailed in each registration circle, except the táluka of Ubauro. The general death-rate from this cause for the Collectorate was 0·18 per 1,000 against 0·18 in 1886; but a very high death-rate (0·66 per 1,000) took place in the táluka of Naushahro. The death-rate (0·30 per 1,000) in the táluka of Lárkhána was also high. The general death-rate from fevers for the Collectorate was 15·27 per 1,000 against 15·67; in 1886 but a high death-rate took place in the tálukás of Naushahro and Shikárpur, in which it was 19·49 and 18·58 respectively. The death-rate (17·56 per 1,000) in the town of Sukkur was also high :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Shikárpur.	Shikárpur R. C.	32,616	477·50	68·30	Information not available in the Census Report.	1,325	40·62	29·71	..	..	3	0·09	606	18·58	4	0·12	16	0·49	5	0·15	634	19·44	14·59
	Sukkur ,,	51,238	284	180·41		1,788	34·90	34·74	20	0·39	2	0·04	788	15·38	4	0·08	13	0·25	10	0·19	837	16·34	19·37
	Naushahro ,,	65,728	402	163·62		2,184	33·19	33·40	..	..	37	0·56	1,086	19·49	7	0·13	17	0·31	14	0·25	1,161	20·83	19·04
	Rohri ,,	68,582	1,550	44·25		1,549	22·59	21·56	..	..	7	0·10	877	12·79	34	0·50	22	0·42	37	0·54	984	14·35	15·89
	Ghotki ,,	61,502	554	110·01		2,274	36·97	29·90	..	..	8	0·13	1,021	16·60	11	0·18	18	0·29	13	0·21	1,071	17·41	15·02
	Mirpur ,,	39,112	1,721	22·73		1,317	34·44	31·58	..	..	7	0·18	575	14·70	2	0·05	17	0·43	5	0·13	606	15·49	13·78
	Ubauro ,,	39,918	450	88·71		1,031	25·83	15·18	..	..	..	..	512	12·83	8	0·20	15	0·38	3	0·08	538	13·48	10·44
	Lárkhána ,,	83,952	291	288·49		2,650	31·57	29·55	..	..	25	0·30	1,045	12·45	2	0·02	28	0·33	5	0·06	1,105	13·16	13·79
	Kambar ,, } Rato-dero ,, } Shahdádpur ,,	151,489	1,396	268·79		4,767	31·47	32·68	72	0·48	34	0·22	2,182	14·40	8	0·05	63	0·42	46	0·30	2,405	15·88	16·35
	Kakar ,, } Labdarya ,, } Mehar ,, } Nasirabad ,,	49,500	598	82·78		1,734	35·03	37·62	..	..	4	0·08	797	16·10	2	0·04	34	0·69	7	0·14	844	17·05	22·67
		135,908	1,133	488·10		5,555	39·40	37·27	..	..	16	0·12	2,161	15·90	8	0·06	58	0·43	22	0·16	2,265	16·67	17·89
	Shikárpur T. C.	42,496	9·50	4,473·26	1	961	22·61	19·46	..	..	1	0·02	681	16·03	17	0·40	12	0·28	37	0·87	748	17·60	19·94
	Sukkur ,,	27,389	..	..	1	815	29·76	27·53	96	3·50	3	0·11	481	17·56	50	1·83	15	0·55	89	3·25	734	26·80	20·52
	Lárkhána ,,	13,188	..	..	1	512	38·82	40·42	13	0·99	1	0·08	214	16·23	4	0·30	6	0·45	48	3·64	286	21·69	22·52
	Travelling Population	863	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	1887	852,086	100·01	65·29	1,373	23,292	33·17	..	201	0·24	148	0·18	13,026	15·27	161	0·19	341	0·40	341	0·40	14,218	16·67	—
	1886					26,671	31·27	..	..	..	148	0·18	13,368	15·67	138	0·16	376	0·44	331	0·39	14,361	16·84	..
	Mean for 10 years, 1877—1886					12,921	15·71	..	543	0·66	149	0·18	9,939	12·07	207	0·25	325	0·40	333	0·41	11,496	13·98	..

N.B.—The total area of the Collectorate includes the area of the Kohistan Hill, which is 1,135 square miles.
The births and deaths in Kambar, Rato-dero and Shahdádpur tálukás have been taken together, as the population, according to the Census of 1881 is not obtainable for each separately, so for the tálukás of Labdarya, Mehar and Nasirabad the births and deaths have been added together.
The areas, in square miles, of the towns of Sukkur and Lárkhána are included in their respective tálukás, as they are not separately shown in the Census Report.

Upper Sind Frontier.

63. In the Upper Sind Frontier Collectorate no deaths from cholera were recorded during 1887. No deaths from small-pox were registered during the year against 12 or 0·10 per 1,000 in 1886. The general death-rate from fevers for the Collectorate was 10·94 per 1,000 against 11·23 in 1886; but the death-rate (13·92 per 1,000), which is nearly the same as that in the táluka of Jacobabad (13·17 per 1,000) in the town of Jacobabad, was high :—

Collectorate.	Registration Circles.	Population according to Census of 1881.	Area in Square Miles.	Average Population per Square Mile.	Number of Towns and Villages.	Births. Number for 1887.	Births. Ratio per 1,000 of Population.	Births. Ratio per 1,000 of Population in 1886.	Cholera. Number.	Cholera. Ratio per 1,000 of Population.	Small-pox. Number.	Small-pox. Ratio per 1,000 of Population.	Fevers. Number.	Fevers. Ratio per 1,000 of Population.	Bowel-complaints. Number.	Bowel-complaints. Ratio per 1,000 of Population.	Injuries. Number.	Injuries. Ratio per 1,000 of Population.	Other Causes. Number.	Other Causes. Ratio per 1,000 of Population.	All Causes. Number.	All Causes. Ratio per 1,000 of Population.	Ratio of Deaths from all Causes per 1,000 of Population in 1886.
Upper Sind Frontier.	Jacobabad R. C.	25,972	455	57·08	Information not available in the Census Report.	866	34·11	35·38	..	..	..	..	342	13·17	2	0·08	7	0·27	2	0·08	353	13·59	13·17
	Thul ,,	43,025	821	52·41		1,144	26·59	26·17	..	..	..	..	460	10·69	2	0·05	18	0·42	7	0·16	487	11·32	11·34
	Kashmor ,,	43,832	863	50·79		711	16·22	23·75	..	..	..	..	398	9·08	4	0·09	5	0·11	10	0·23	417	9·51	9·72
	Jacobabad T. C.	11,352	..	..	1	235	20·70	19·03	..	..	..	..	158	13·92	18	1·59	4	0·35	36	3·17	216	19·03	24·05
	1887	124,181	2,139	58·05	143	2,976	23·97	..	..	..	..	..	1,358	10·94	26	0·21	34	0·27	55	0·44	1,473	11·86	..
	1886					3,302	26·59	..	..	..	12	0·10	1,394	11·23	39	0·31	28	0·23	70	0·56	1,543	12·43	..
	Mean for 10 years, 1877—1886					1,472	13·32	..	82	0·74	21	0·19	933	8·44	35	0·33	31	0·28	55	0·50	1,158	10·48	..

N.B.—The area of the town of Jacobabad is included in the Jacobabad Táluka, as it is not separately shown in the Census Report.

64. The following table shows the recorded death-rate in each of the 7 Cantonments in British territory in 1887 contrasted with the results of the preceding year :—

Death-rates in Cantonments in British territory.

Cantonments.	Ratio per 1,000 of Population.	
	1887.	1886.
Devláli	25·78	23·02
Málegaon	58·46	31·48
Ahmednagar	17·43	17·65
Poona	26·12	27·19
Kirkee	35·11	35·39
Belgaum	15·86	16·07
Ahmedabad	19·07	14·95

In all the Cantonments, except Devláli, Málegaon and Ahmedabad, the recorded death-rate in 1887 was lower than in 1886. The extremely high death-rate (58·46 per 1,000) from all causes in the Cantonment of Malegaon was due to the following causes :—

Cholera	7·40	per 1,000 of population.
Small-pox	2·65	„
Fevers	20·37	„
Other causes	28·04	„
All causes	58·46	„

It will be seen that nearly half the number of total deaths was recorded from "other causes." This result shows that the registration of deaths in this Cantonment is inaccurate and much greater attention is required to be paid to it. The same remark applies to the Cantonments of Ahmednagar, Belgaum and Ahmedabad, where the recorded death-rates, as noticed in last year, cannot be accepted as even approximately correct.

65. The following table shows the vitál statistics among the civil population of those Cantonments which are situated in quasi-foreign territory. The total number of births registered in these Cantonments during the year 1887 was 2,912 against 2,585 in 1886, the birth-rate being 30·40 per 1,000 of population against 26·96 in 1886. In Aden (Municipal limits) Neemuch and Rájkot the recorded birth-rate was higher than in 1886. In the remaining Cantonments it was lower :—

Statistics of Cantonment Bázárs in quasi-foreign territory.

Cantonments.	Ratio per 1,000 of Population.	
	Birth-rate, 1887.	Birth-rate, 1886.
Aden (Municipal limits)	24·75	13·61
Baroda	15·75	18·24
Bhúj	8·38	16·76
Deesa	32·83	36·77
Mehidpur	26·55	35·40
Mhow	20·72	21·29
Neemuch	36·95	33·39
Nasirabad	50·93	51·30
Rájkot	11·08	8·66

The total number of deaths in these Cantonments during the year was 3,378 equal to a ratio of 35·27 per 1,000 against 2,946 or 30·75 in 1886. Three deaths were recorded from cholera against 27 in 1885. Out of these 3 deaths 2 were

recorded in the Cantonment of Mhow and 1 in Nasirabad. From small-pox there were 9 deaths against 27 in 1886, 6 of which took place in Aden, 2 in Mhow and 1 in Nasirabad. The deaths from fevers were 1,259 against 1,146 in 1,886. A high death rate from fevers is reported—

From Mehidpur	...	...	...	61·95 per 1,000
„ Deesa	...	...	...	19·58 „
„ Aden (Municipal limits)	...	...	...	15·44 „

Bowel-complaints caused 376 deaths against 316 in 1886. In Aden (Municipal limits) 252 deaths were ascribed to this cause. This points almost conclusively to an impure water-supply. Injuries caused 19 deaths against 29 in 1886, and the number from other causes amounted to 1,712 against 1,401 in 1886:—

Cantonments.	Civil Population according to Census of 1881.	Area in Square Miles.	Average Population per Square mile.	Births.	Ratio of Births per 1,000 of Population.	Number of Deaths.							Ratio per 1,000 of Population.						
						Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	Other Causes.	All Causes.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries	Other Causes.	All Causes.
Aden—Municipal limits	29,533	6	4,922·17	731	24·75	...	6	456	252	10	774	1,498	...	0·20	15·44	8·53	0·34	26·21	50·72
Aden—Purely Civil portion of Cantonments.	793	†5	...	3	3·78	...	..	1	...	...	3	4	...	...	1·26	...	...	3·78	5·04
Baroda	2,412	1	2,412·	38	15·75	...	...	32	8	...	12	53	...	...	13·28	3·32	...	4·98	21·98
Bhúj	358	1·04	344·23	3	8·38	...	...	1	...	...	2	3	...	...	2·79	...	...	5·59	8·38
Deesa	8,376	6	1,675·20	274	32·83	...	...	164	10	...	69	243	...	...	19·58	1·19	...	8·24	29·01
Mehidpur	113	2	56·50	3	26·56	...	...	7	1	1	...	9	...	...	61·95	8·85	8·85	...	79·65
Mhow	17,471	6·50	2,687·85	352	20·72	2	2	229	9	...	359	601	0·11	0·11	13·10	0·52	..	20·55	34·39
Neemuch	12,639	4·52	2,796·24	467	36·95	...	...	101	3	...	192	296	...	...	7·99	0·24	..	15·20	23·42
Nasirabad	19,123	8·00	2,390·37	974	50·93	1	1	255	92	8	290	647	0·05	0·05	13·33	4·82	0·42	15·16	33·83
Rájkot	4,065	Not	given.	56	11·08	...	...	12	1	...	11	24	...	...	2·42	0·20	...	2·21	4·83
Total ...	95,783	39·06	2,452·20	2,912	30·40	3	9	1,259	376	19	1,712	3,378	0·03	0·09	13·14	3·93	0·20	17·87	35·27

† This is the area of the *whole* of Cantonments, both Military and Civil. The Civil population being mixed up with the Military it is impossible to give the population per square mile.

* According to the census of 1881. The Daswin Bazar containing 355 persons ceased to be a part of the Cantonment since 1881 and has been merged into municipal limits.

I am indebted to Captain Sealey, the energetic officer in charge of the Municipality, Aden, for the following note regarding the registration of vital statistics in that Settlement:—

The population of Aden is broadly divided into—

(*a*) registered,

(*b*) unregistered;

the latter is constantly on the move.

The number of males in Aden is very nearly twice that of the females. This fact decreases the birth-rate largely. Many females (Europeans, Parsis, &c.) leave Aden for their confinements; this also depresses the birth-rate. Many "unregistered" Somalis and Africans who visit Aden do so just after and not before a confinement. A large number of firemen and coal-trimmers are separated from their wives for a great part of the year These facts likewise depress the birth-rate.

Nevertheless the figures of 1887 conclusively show the progress made in registration of births since the introduction of a special staff. Were the sexes equally divided, the births registered in 1887 would very closely approach 40 per mille.

There has been a large increase of deaths as compared with 1886. A special Medical Board assembled by the Political Resident has traced this increase almost entirely to deaths among children among whom measles and whooping cough prevailed in an almost epidemic form.

Part of the increase in deaths must, however, be also attributed to the increase of population at Shaikh Othman where the population has risen from about 7,000 in 1886 to about 10,000 in 1887.

The registration of vital statistics in the Cantonment of Nasirabad was, as usual, very well carried out. The registration of births in the Cantonments of Aden, Baroda, Bhúj, Mehidpur, Mhow and Rájkot is not well attended to, as the result arrived at is far below what it ought to be. In the Cantonments of Deesa and Neemuch the registration of births appears to have been fairly well attended to. At Rájkot the registration of vital statistics, as pointed out before, is very much neglected. Surely some steps are necessary for its improvement, and I hope that Government in the Military Department will be pleased to call the attention of the station authorities to this matter.

SECTION VI.

HISTORY OF CHIEF DISEASES.

CHOLERA.

Mortality in 1887.

66. During 1887, 13,576 males and 12,135 females, or a total of 25,711 persons, died from cholera, while in the preceding year only 167 deaths were recorded from this disease.

Monthly mortality.

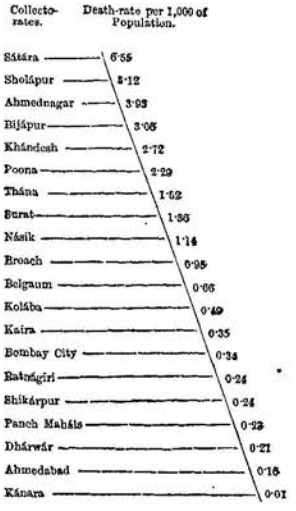
67. The following table shows the monthly distribution of these deaths in each Collectorate as compared with 1886 and the decennial mean :—

Months.	Mean for 10 years, 1877—1886.		1886.		1887.		Deaths by Collectorates during 1887.																			
	Number of Deaths.	Ratio per 1,000 of Population.	Number of Deaths.	Ratio per 1,000 of Population.	Number of Deaths.	Ratio per 1,000 of Population.	Khándesh.	Násik.	Thána.	Bombay (City).	Kolába.	Ahmednagar.	Poona.	Sholápur.	Sátára.	Ratnágiri.	Belgaum.	Dhárwár.	Bijápur.	Kánara.	Surat.	Broach.	Kaira.	Panch Mahals.	Ahmedabad.	Shikárpur.
January ..	643	·04	83	·01	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
February ..	643	·04	2	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
March	1,061	·06	1	..	16	..	9	5	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
April	1,785	·11	1	..	159	·01	41	..	11	2	..	9	..	38	57	..	..	..	..	..	..	..	..	..	1	..
May	3,128	·19	5	..	1,840	·11	290	19	24	1	..	23	1	448	980	..	..	7	38	..	..	..	..	..	..	..
June	4,509	·28	2	..	5,613	·34	928	183	48	8	..	715	48	915	2,254	3	44	29	316	..	120	..	1	1	..	..
July	4,708	·29	8	..	6,882	·42	780	219	175	46	..	1,226	471	1,080	2,186	28	179	8	417	..	42	..	22	..	..	..
August ..	3,369	·20	11	..	5,123	·31	1,121	273	325	101	23	680	551	248	911	89	77	33	437	..	123	92	15	..	11	104
September ..	1,272	·08	23	..	2,762	·17	182	113	189	48	108	286	441	198	203	65	106	42	263	..	279	67	3	17	31	61
October ..	788	·05	16	..	1,611	·09	..	41	195	37	44	190	217	29	176	4	64	14	404	3	84	6	23	37	27	36
November ..	400	·03	3	..	1,072	·07	..	30	190	15	..	6	168	15	100	27	25	25	67	..	70	129	119	4	66	..
December ..	237	·01	7	..	632	·04	..	11	65	2	63	..	161	4	90	26	1	34	10	..	116	17	28	..	4	..
Total ..	22,543	1·38	167	·01	25,711	1·56	3,360	894	1,228	262	238	2,054	2,058	2,984	6,957	242	566	187	1,052	3	834	311	281	59	140	201

In January the exciting cause of the disease, whatever that may be, was entirely quiescent throughout the Presidency and not a single case occurred. In February one death was recorded in the city of Bombay, but in March there were 9 deaths in the Khándesh and 5 in the Násik Collectorates, whilst 2 deaths took place in Bombay. In April 159 deaths were recorded in 7 registration districts. In May the disease became greatly intensified and spread to 10 Collectorates, causing 1,840 deaths. In June it assumed a still greater intensity and no less than 5,613 deaths were reported from 15 out of the 24 Collectorates in the Presidency. In July it attained its maximum degree of intensity and carried off as many as 6,882 persons. In August a fall took place, and only 5,123 deaths were reported, while in September the disease, although subsiding, prevailed more or less in 19 Collectorates and caused 2,762 deaths. In October and November a still further decline took place and only 1,611 and 1,072 deaths were recorded. In December the disease abated considerably but lingered in 15 Collectorates and caused 632 deaths.

Death-rates by Collectorates.

68. The following table shows the intensity of the disease as exemplified by the death-rate per 1,000 of population in each of the affected Collectorates :—



The ravages of the disease were most severely felt in the Deccan and principally in three of the five Collectorates comprising the Central Registration District. In Sátára, the death-rate attained to the very high ratio of 6·55 per 1,000. In Sholápur also there was a very high death-rate—5·12 per mille, whilst in Ahmednagar although it was not so intense it still reached the high ratio of 3·93 per 1,000. The epidemic although widely distributed did not exhibit any very serious severity in other parts of the Presidency. In Sind its incidence was but slight and was only fatal in the Shikárpur Collectorate where 201 deaths were reported. The remaining districts entirely escaped, except that one case was reported in Karáchi which, however, ended in recovery.

Mortality in rural circles.

69. The following table shows in order of highest death-rate the rural circles, 19 in all, in which the deaths from cholera exceeded 5 per 1,000 of population, and that the disease principally prevailed in seven circles of the Sátára Collectorate, in four of the Sholápur Collectorate, in three of the Ahmednagar Collectorate, in two of the Khándesh Collectorate and in one respectively of the Násik, Poona, and Bijápur Collectorates :—

No. in sequence.	Name of Rural Circle.	Name of Collectorate.	Population of the Circle.	No. of Cholera Deaths.	Ratio per 1,000 of Population.
1	Khánápur	Sátára	80,327	1,145	14·25
2	Tásgaon	Do.	79,704	984	12·34
3	Sángola	Sholápur	62,849	576	9·16
4	Jámkhed	Ahmednagar	60,960	494	8·10
5	Khatáv...	Sátára	74,027	598	8·08
6	Nevása...	Ahmednagar	78,158	618	7·91
7	Mán	Sátára	52,111	394	7·56
8	Karád	Do.	130,142	952	7·31
9	Válva	Do.	169,408	1,176	6·94
10	Indi	Bijápur	71,940	487	6·77
11	Karmála	Sholápur	61,548	400	6·50
12	Koregaon	Sátára	81,187	517	6·37
13	Mádha	Sholápur	67,961	423	6·22
14	Purandhar	Poona...	75,678	468	6·18
15	Sholápur	Sholápur	89,649	497	5·54
16	Jalgaon	Khándesh	59,283	322	5·43
17	Chopda...	Do.	45,903	241	5·25
18	Karjat	Ahmednagar	34,820	181	5·20
19	Nandgaon	Násik	30,399	156	5·13

High mortality in towns.

70. In the following towns and in the undermentioned Cantonment the death-rate exceeded five per mille :—

No.	Towns.	Collectorate.	Population of Towns.	Number of Cholera Deaths.	Ratio per 1,000 of Population.
1	Karád T. C. ...	Sátára	10,778	93	8·62
2	Pandharpur „ ...	Sholápur	16,910	145	8·57
3	Málegaon Ct. ...	Násik	3,780	28	7·41

Villages affected by cholera.

71. Out of the 24,535 villages in the Presidency 2,461 or 10·03 per cent. were affected by cholera. The highest percentage took place in Sholápur Collectorate, where out of the 709 total villages 282 or 39·77 per cent. were affected. In Sátára out of 1,340 total villages, the disease appeared in 441 or 32·91 per cent. In the Ahmednagar, Bijápur, and Poona Collectorates the percentages were respectively 26·67, 23·44 and 21·68 ; and in Khándesh, Surat and Broach they were 12·02, 11·40 and 10·92 ; whilst in the remaining 12 Collectorates they were below 6. The following table shows the percentage of affected villages to total villages in each Collectorate :—

Collectorates.	Total Villages.	Villages affected by Cholera.	Percentage of affected Villages to Total Villages.
Khándesh	2,679	322	12·02
Násik	1,629	97	5·95
Thána	1,880	106	5·64
Kolába	1,191	28	2·35
Ahmednagar	1,331	355	26·67
Poona	1,181	256	21·68
Sholápur	709	282	39·77
Sátára	1,340	441	32·91
Ratnágiri	1,295	33	2·55
Belgaum	1,073	60	5·59
Dhárwár	1,281	27	2·11
Bijápur	1,139	267	23·44
Kánara	1,107	2	0·18
Surat	780	89	11·40
Broach	403	44	10·92
Kaira	577	23	3·99
Panch Mahále	673	7	1·04
Ahmedabad	857	14	1·63
Karáchi	722	1	0·14
Hyderabad	1,104	.....	.....
Thar and Párkar	72	.....	.....
Shikárpur	1,370	7	0·51
Upper Sind Frontier	142	.....	.....
Total ...	24,535	2,461	10·03

Attacks and deaths.

72. The following table represents the number of attacks and deaths and the percentages of deaths to attacks in each Collectorate, the mean percentage being 45·73. Very high percentages were noticed in the Shikárpur (63·41), Thána (63·33) and Kaira (62·03) Collectorates, and also in the City of Bombay (60·51). In eight other Collectorates, namely,—Kolába, Poona, Sátára, Dhárwár, Surat, Broach, Panch Mahále and Ahmedabad, the percentages were above the mean; whilst in the remaining seven Collectorates they were below it :—

Collectorate.	Attacks.	Deaths.	Percentage of Attacks to Deaths.
Khándesh	7,991	3,360	42·05
Násik	2,303	894	38·39
Thána	1,939	1,228	63·33
Bombay (City)	433	262	60·51
Kolába	410	238	58·05
Ahmednagar	6,735	2,954	43·86
Poona	4,155	2,058	49·53
Sholápur	6,839	2,984	43·63
Sátára	15,136	6,957	45·96
Ratnágiri	573	242	42·23
Belgaum	1,265	566	44·74
Dhárwár	390	187	47·94
Bijápur	4,529	1,952	43·10
Kánara	3	3	100·00
Surat	1,717	834	48·57
Broach	666	311	46·69
Kaira	453	281	62·03
Panch Mahále	116	59	50·86
Ahmedabad...	257	140	54·47
Karáchi	1	.....	.....
Shikárpur	317	201	63·41
Total ...	56,228	25,711	45·73

Statement appended to cholera map.

73. The following table is the statement ordered by the Government of India, to be appended to the cholera map, and it shows each Collectorate affected by cholera; the name and number of each circle; its population; the dates of first and last cases; the total cholera deaths; their ratios per 10,000 of population; the period of maximum intensity; the number of villages in each rural circle; and the number of those affected and not affected by the disease.

Statement appended to Cholera Map, illustrating the Distribution, &c., of Cholera in the Bombay Presidency during the year 1887.

1	2	3	4	5	6	7	8	9		10	11	
Collectorates.	Number of Circles as shown in the Map.	Name of Circle.	Population.	Date of first case of Cholera in the Circle during the year.	Date of last case of Cholera in the Circle during the year.	Total Deaths from Cholera in the Circle during the year.	Ratio per 10,000.	Period of Maximum Intensity of the Disease. From	To	Number of Villages in each of the Rural Circle.	Number of those Affected by Cholera.	Not affected by Cholera.
Khándesh.	1	Dhulia R.C. ...	59,658	5th April 1887...	21st Sept. 1887...	195	32·67	August 1887...	August 1887 ...	152	17	135
	2	Amalner " ...	88,980	27th May " ...	6th " " ...	89	32·81	" " ...	" " ...	225	13	198
	3	Párola " ...		4th June " ...	28th August " ...	203		July " ...	" " ...		14	175
	4	Erandol " ...	90,872	31st May " ...	13th Sept. " ...	240	26·41	June " ...	June " ...	198	23	
	5	Páchora " ...	100,051	14th April " ...	30th " " ...	245	28·48	August " ...	August " ...	187	24	157
	6	Bhadgaon " ...		10th August " ...	7th " " ...	30		" " ...	" " ...		6	111
	7	Chálisgaon " ...	59,031	3rd July " ...	21st " " ...	179	30·32	" " ...	" " ...	132	21	188
	8	Nandurbár " ...	56,025	6th " " ...	15th " " ...	66	11·78	" " ...	" " ...	195	7	149
	9	Taloda " ...	49,788	3rd April " ...	14th " " ...	23	4·62	July " ...	July " ...	151	2	245
	10	Sháhada " ...	64,368	6th July " ...	4th " " ...	121	18·80	" " ...	" " ...	258	12	131
	11	Sindkheda " ...	61,461	23rd June " ...	" " " ...	39	6·34	August " ...	August " ...	140	9	84
	12	Shirpur " ...	43,321	15th " " ...	31st July " ...	80	18·47	July " ...	July " ...	99	16	71
	13	Chopda " ...	46,903	27th May " ...	4th August " ...	241	52·50	June " ...	June " ...	91	20	
	14	Sávda " ...	141,745	26th March " ...	19th " " ...	252	43·74	" " ...	" " ...	182	23	120
	15	Yával " ...		29th May " ...	10th Sept. " ...	111		" " ...	" " ...		13	
	16	Ráver " ...		17th June " ...	17th August " ...	237		July " ...	July " ...		16	
	17	Bhusával " ...	96,160	21st May " ...	11th Sept. " ...	211	40·97	August " ...	August " ...	189	22	153
	18	Edalabad " ...		20th " " ...	19th " " ...	183		June " ...	June " ...		13	64
	19	Jalgaon " ...	59,283	17th " " ...	15th " " ...	323	54·31	" " ...	" " ...	87	23	129
	20	Jámner " ...	83,535	31st " " ...	21st " " ...	199	23·46	August " ...	August " ...	158	29	...
	21	Dhulia T.C. ...	18,449	15th August " ...	30th August " ...	8	4·34	" " ...	" " ...	...	...	...
	22	Chopda " ...	13,932	12th June " ...	11th " " ...	25	17·95	June " ...	June " ...	...	...	...
	23	Nasirabad " ...	10,243	20th May " ...	29th " " ...	34	33·19	August " ...	August " ...	...	...	...
Násik.	24	Násik R.C. ...	67,910	6th July " ...	1st October " ...	6	0·88	Sept. " ...	Sept. " ...	135	2	133
	25	Sinnar " ...	66,081	10th Sept. " ...	18th " " ...	20	3·03	October " ...	October " ...	109	1	98
	26	Dindori " ...	72,290	13th October " ...	2nd Nov. " ...	16	2·21	" " ...	" " ...	128	3	125
	27	Niphád " ...	87,523	20th July " ...	25th August " ...	35	4·00	August " ...	August " ...	121	9	112
	28	Chándor " ...	50,899	1st August " ...	6th October " ...	61	11·95	" " ...	" " ...	108	10	98
	29	Yeola " ...	35,597	24th June " ...	24th " " ...	85	23·88	July " ...	July " ...	117	13	104
	30	Nándgaon " ...	30,399	14th " " ...	9th " " ...	166	54·32	June-Aug. " ...	June-Aug.	83	19	69
	31	Málegáon " ...	74,718	26th May " ...	28th Dec. " ...	305	40·82	June " ...	June " ...	144	27	117
	32	Báglán " ...	64,875	22nd July " ...	26th Nov. " ...	67	10·32	Nov. " ...	Nov. " ...	155	11	144
	33	Kalwan " ...	58,486	18th August " ...	18th August " ...	1	0·17	August " ...	August " ...	147	1	136
	34	Peint " ...	55,144	11th " " ...	11th " " ...	...	...	" " ...	" " ...	221	1	220
	35	Násik T.C. ...	24,101	2nd June " ...	16th Sept. " ...	74	30·74	July " ...	July " ...	...	...	...
	36	Yeola " ...	17,685	5th March " ...	21st August " ...	40	22·62	" " ...	" " ...	...	...	...
	37	Málegáon " ...	3,780	15th June " ...	" Sept. " ...	28	74·08	" " ...	" " ...	...	...	...

1	2	3	4	5	6	7	8	9		10	11	
Collectorate.	Number of Circles as shown in the Map.	Name of Circle.	Population.	Date of first case of Cholera in the Circle during the year.	Date of last case of Cholera in the Circle during the year.	Total Deaths from Cholera in the Circle during the year.	Ratio per 10,000.	Period of Maximum Intensity of the Disease. From	To	Number of Villages in each of the Taluka Circle.	Number of those Affected by Cholera.	Not affected by Cholera.
Thána.	38	Máhim R.C.	77,360	2nd Sept. 1887	19th Dec. 1887	110	14·22	Dec. 1887	Dec. 1887	186	5	181
	39	Váda "	36,498	4th Aug. "	18th Aug. "	16	4·38	Aug. "	Aug. "	153	1	152
	40	Sháhpur "	107,729	14th July "	5th Dec. "	117	10·86	Nov. "	Nov. "	273	10	263
	41	Murbád "	63,934	21st April "	30th " "	172	26·90	Aug. "	Aug. "	171	20	151
	42	Kalyán "	55,078	1st May "	8th Sept. "	135	20·74	July "	July "	222	9	213
	43	Bhiwndi "	76,363	4th " "	8th Dec. "	260	34·50	Sept. "	Sept. "	194	22	172
	44	Bassein "	68,967	3rd June "	15th " "	110	15·95	Aug. "	Aug. "	92	12	80
	45	Sálsette "	95,693	4th July "	7th " "	138	14·73	" "	" "	112	9	103
	46	Karjat "	82,062	28th Aug. "	26th Nov. "	150	18·28	Oct. "	Oct. "	268	18	250
	47	Kalyán T.C.	12,910	15th " "	8th " "	20	15·49	Aug. "	Aug. "	...	...	...
Bombay City.	48	Bombay City T.C.	773,196	20th Feb. "	25th Dec. "	262	3·40	" "	" "	...	...	...
Kolába.	49	Panvel R.C.	90,839	14th Aug. "	7th Oct. "	75	8·26	Sept. "	Sept. "	218	12	206
	50	Alibág "	60,762	1st Sept. "	21st Dec. "	96	13·76	" "	" "	171	7	164
	51	Roha "	44,835	11th Aug. "	30th " "	42	9·37	Dec. "	Dec. "	133	4	129
	52	Mángaon "	81,085	24th Oct. "	7th " "	10	1·22	Oct. "	Oct. "	223	2	223
	53	Mahád "	102,557	28th Dec. "	28th " "	14	1·36	Dec. "	Dec. "	245	3	242
	54	Mahád T.C.	6,804	" "	" "	1	1·47	" "	" "	...	...	...
Ahmednagar.	55	Nagar R.C.	71,458	4th June "	11th Nov. "	200	36·38	July "	July "	108	34	74
	56	Akola "	60,800	16th Aug. "	22nd Sept. "	29	4·77	Sept. "	Sept. "	159	3	156
	57	Jámkhed "	60,060	3rd July "	30th " "	494	81·04	Aug. "	Aug. "	75	45	30
	58	Parner "	73,701	16th June "	8th Nov. "	184	24·96	Oct. "	Oct. "	122	27	95
	59	Shrigonda "	51,291	1st July "	1st " "	118	23·01	July "	July "	84	13	71
	60	Karjat "	34,820	12th June "	20th Sept. "	181	51·97	" "	" "	79	23	56
	61	Nevása "	78,158	28th May "	25th Aug. "	618	79·07	June "	June "	145	71	74
	62	Kopargaon "	63,789	17th April "	9th " "	167	26·18	July "	July "	121	25	96
	63	Sangamner "	59,561	29th " "	19th Oct. "	104	17·46	Aug. "	Aug. "	151	23	128
	64	Ráhuri "	63,239	3rd June "	13th Sept. "	268	42·34	June "	June "	111	34	77
	65	Shevgaon "	57,113	1st " "	30th " "	422	48·44	July "	July "	189	57	123
	66	Ahmednagar T.C.	32,903	11th " "	1st Oct. "	69	20·97	" "	" "	...	...	...
	67	Sangamner "	8,796	7th Aug. "	2nd " "	40	45·48	Aug. "	Aug. "	...	...	...
Poona.	68	Junnar R.C.	91,000	1st Sept. "	15th Dec. "	154	16·76	Oct. "	Oct. "	153	31	122
	69	Indápur "	48,114	28th June "	19th Nov. "	82	17·04	July "	July "	86	12	74
	70	Khed "	141,890	22nd July "	4th Dec. "	232	16·35	Sept. "	Sept. "	244	32	212
	71	Sirúr "	72,793	8th Aug. "	19th " "	51	7·01	Aug. "	Aug. "	76	12	64
	72	Purandhar "	75,678	1st July "	26th " "	468	61·84	" "	" "	92	44	48
	73	Bhimthadi "	110,428	17th June "	28th " "	309	27·17	July "	July "	126	48	81
	74	Haveli "	150,059	14th " "	29th Dec. "	346	23·06	Sept. "	Sept. "	237	60	177
	75	Mável "	62,883	13th Aug. "	3rd " "	101	16·19	Nov. "	Nov. "	164	17	147
	76	Poona City T.C.	99,022	25th May "	31st " "	318	31·52	Dec. "	Dec. "	...	...	...
	77	Poona Ct.	25,042	29th June "	16th Nov. "	10	3·99	July "	July "	...	...	...
Sholápur.	78	Sholápur R.C.	89,049	1st May "	20th Nov. "	407	55·44	June "	June "	146	65	81
	79	Bársi "	93,920	16th June "	31st Oct. "	234	24·91	July "	July "	122	32	90
	80	Mádha "	67,061	18th April "	8th Dec. "	423	62·24	May "	May "	89	45	44
	81	Karmála "	61,548	4th May "	18th Oct. "	400	64·99	July "	July "	123	42	81
	82	Pandharpur "	55,302	28th March "	30th Sept. "	162	29·29	June "	June "	84	31	53
	83	Sángola "	62,849	6th May "	30th Oct. "	576	91·65	" "	" "	76	40	36
	84	Máloshra "	58,332	18th " "	28th " "	219	37·54	" "	" "	69	27	42
	85	Sholápur T.C.	59,820	2nd " "	5th Aug. "	256	42·74	July "	July "	...	...	...
	86	Bársi "	16,126	12th " "	2nd Sept. "	72	44·64	" "	" "	...	...	...
	87	Pandharpur "	16,910	28th June "	3rd Nov. "	145	85·75	" "	" "	...	...	...
Sátára.	88	Sátára R.C.	99,835	26th May "	30th Nov. "	375	41·26	Aug. "	Aug. "	147	50	97
	89	Jávli "	53,793	27th June "	26th Dec. "	36	6·69	" "	" "	197	11	186
	90	Wái "	76,934	8th " "	31st " "	266	34·58	" "	" "	124	31	93
	91	Karád "	130,143	13th May "	22nd Nov. "	952	73·15	June "	June "	103	68	35
	92	Váluá "	169,408	17th " "	28th Sept. "	1176	69·42	" "	" "	136	45	91
	93	Tásgaon "	79,704	8th " "	31st Aug. "	984	123·45	" "	" "	49	34	15
	94	Khánápur "	80,327	22nd April "	" Dec. "	1145	142·54	July "	July "	91	71	20
	95	Khatáv "	74,027	7th " "	8th Nov. "	598	80·78	" "	" "	84	42	42
	96	Mán "	52,111	26th May "	23rd " "	394	75·61	" "	" "	76	27	51
	97	Koregaon "	81,767	2nd June "	31st Dec. "	517	63·28	" "	" "	74	36	38
	98	Pátan "	112,414	10th May "	12th " "	341	30·33	June "	June "	202	26	176
	99	Sátára T.C.	29,028	29th " "	23rd " "	36	12·40	July "	July "	...	...	...
	100	Karád "	16,778	14th " "	27th June "	93	86·29	June "	June "	...	...	...
	101	Wái "	11,676	8th Oct. "	31st Dec. "	44	37·68	Dec. "	Dec. "	...	...	...
Ratnágiri.	102	Málvan R.C.	109,953	18th Aug. "	29th Sept. "	13	1·19	Aug. "	Sept. "	67	1	66
	103	Devgad "	117,899	13th Nov. "	30th Dec. "	28	2·37	Nov. "	Nov. "	121	5	116
	104	Ratnágiri "	118,611	21st June "	11th Oct. "	100	8·80	Aug. "	Aug. "	149	11	138
	105	Chiplún "	103,921	8th Aug. "	28th Dec. "	69	4·69	" "	" "	212	11	201
	106	Khed "	91,492	5th Nov. "	9th Nov. "	9	0·98	Nov. "	Nov. "	146	1	145
	107	Dápoli "	141,012	22nd Aug. "	15th Dec. "	17	1·21	Sept. "	Sept. "	247	4	243
	108	Ratnágiri T.C.	12,910	3rd Sept. "	9th Oct. "	6	4·76	" "	" "	...	...	...
Belgaum.	109	Bidi or Khánápur R.C.	79,364	30th Dec. "	31st Dec. "	1	0·12	Dec. "	Dec. "	119	1	118
	110	Chikodi "	245,614	16th June "	20th Nov. "	277	11·29	July "	July "	213	29	184
	111	Parasgad "	91,820	16th Sept. "	16th Sept. "	1	0·11	Sept. "	Sept. "	127	1	126
	112	Gokák "	81,722	28th July "	22nd Oct. "	66	7·08	Aug. "	Aug. "	113	9	104
	113	Athni "	94,775	2nd June "	27th " "	172	18·15	Sept. "	Sept. "	89	29	60
	114	Belgaum T.C.	23,115	10th Oct. "	8th Nov. "	19	8·22	Oct. "	Oct. "	...	...	...
	115	Gokak "	10,307	7th Aug. "	26th Oct. "	6	5·82	Aug. "	Aug. "	...	...	...
	116	Athni "	11,186	15th July "	26th Nov. "	24	21·45	Sept. "	Sept. "	...	...	...
Dháráwár.	117	Dháráwár R.C.	* 83,946	22nd Sept. "	22nd Sept. "	1	0·12	Sept. "	Sept. "	127	1	126
	118	Nargund "	† 87,832	22nd June "	5th " "	6	0·68	Aug. "	Aug. "	89	2	87
	119	Gadag "	‡ 85,332	3rd June "	31st Oct. "	22	2·64	Sept. "	Sept. "	99	5	94
	120	Kalghatgi "	50,769	26th Aug. "	30th Sept. "	24	4·72	" "	" "	105	1	104
	121	Bankápur "	76,554	7th " "	15th Oct. "	30	3·92	Aug. "	Aug. "	142	3	139
	122	Ron "	60,724	23rd June "	27th " "	14	2·35	Sept. "	Sept. "	59	6	53
	123	Karajghi "	88,216	9th Nov. "	9th Nov. "	1	0·12	Nov. "	Nov. "	130	1	129
	124	Ranebennur "	64,011	5th " "	31st Dec. "	46	7·19	Dec. "	Dec. "	121	6	115
	125	Kod "	80,945	30th " "	12th " "	8	0·99	Nov. "	Nov. "	177	2	175
	126	Ránebennur T.C.	10,202	" May "	16th " "	35	34·30	June "	June "	...	...	...
Bijápur.	127	Indi R.C.	71,940	21st May "	7th Dec. "	487	67·70	June "	June "	121	54	67
	128	Muddebihál "	65,024	16th July "	16th " "	141	21·69	Aug. "	Aug. "	149	29	120
	129	Sindgi "	72,650	26th June "	12th Nov. "	292	40·19	Oct. "	Oct. "	141	47	94
	130	Bágevádi "	86,743	6th July "	6th " "	295	34·01	Aug. "	Aug. "	120	27	93
	131	Bijápur "	65,472	10th " "	26th " "	202	30·85	Oct. "	Oct. "	91	27	64
	132	Bágalkot "	89,132	29th June "	10th Dec. "	74	8·31	" "	" "	162	9	153
	133	Badámi "	89,047	14th " "	13th " "	146	16·39	Sept. "	Sept. "	195	19	176
	134	Hungund "	80,037	21st " "	29th Nov. "	300	37·48	July "	July "	160	55	105
	135	Bijápur T.C.	11,424	1st Aug. "	14th Sept. "	15	13·13	Aug. "	Aug. "	...	...	...

N.B.—As the population and the total villages for the undermentioned Rural Circles cannot be obtained separately, the ratios are calculated on the grouped population.

* Dháráwár R. C., Mugud Petha. † Navalgund R. C., Nargund R. C. ‡ Gadag R. C., Mundargi Petha R. C.

1	2	3	4	5	6	7	8	9		10	11	
Collectorate.	Number of Circles as shown in the Map.	Name of Circle.	Population.	Date of first case of Cholera in the Circle during the year.	Date of last case of Cholera in the Circle during the year.	Total Deaths from Cholera in the Circle during the year.	Ratio per 10,000.	Period of Maximum Intensity of the Disease. From	To	Number of Villages in each of the Rural Circles.	Number of Tiobs Affected by Cholera.	Not affected by Cholera.
Kánara.	136	Kumta R.C.	48,129	5th Oct. 1887...	6th Oct. 1887...	1	0·27	Oct. 1887 ...	Oct. 1887...	116	1	115
	137	Sirsi „	62,400	1st „ „ ...	1st „ „ ...	2	0·32	„ „ ...	„ „ ...	258	1	257
Surat.	138	Mándvi R.C.	50 810	12th Aug. „ ...	27th Dec. „ ...	40	7·87	„ „ ...	Oct. „ ...	141	7	134
	139	Chorási „	44,764	12th Oct. „ ...	22nd „ „ ...	58	12·96	Nov. „ ...	Nov. „ ...	66	9	57
	140	Bárdoli „	76,100	30th Aug. „ ...	25th „ „ ...	45	5·91	Dec. „ ...	Dec. „ ...	124	5	119
	141	Jalálpor „	74,016	15th Nov. „ ...	30th „ „ ...	11	1·48	„ „ ...	„ „ ...	91	3	88
	142	Chikhli „	60,147	21st Aug. „ ...	17th Oct. „ ...	125	20·78	Sept. „ ...	Sept. „ ...	62	24	38
	143	Bulsár „	67,478	11th June „ ...	28th Dec. „ ...	282	41·79	„ „ ...	„ „ ...	94	28	96
	144	Párdi „	55,761	28th May „ ...	20th Nov. „ ...	157	28·16	June „ ...	June „ ...	82	13	69
	145	Surat T.C.	109,844	3rd Aug. „ ...	31st Dec. „ ...	55	5·01	Dec. „ ...	Dec. „ ...	...	...	...
	146	Bulsár „	13,229	21st June „ ...	14th „ „ ...	61	46·11	Aug. „ ...	Aug. „ ...	...	...	...
Broach.	147	Broach R.C.	73,280	21st Aug. „ ...	5th Dec. „ ...	143	19·51	Nov. „ ...	Nov. „ ...	104	25	79
	148	Vágra „	33,902	26th „ „ ...	17th Nov. „ ...	4	1·18	Aug.-Nov...	Aug.-Nov. ...	69	2	67
	149	Amod „	39,641	2nd Sept. „ ...	24th Dec. „ ...	22	5·58	Nov. „ ...	Nov. „ ...	48	8	40
	150	Jambusar „	66,293	26th Aug. „ ...	30th Nov. „ ...	5	0·75	„ „ ...	„ „ ...	82	4	78
	151	Anklesvar „	65,054	12th Nov. „ ...	26th „ „ ...	4	1·99	„ „ ...	„ „ ...	100	2	98
	152	Hánsot „		15th Nov. „ ...	15th Dec. „ ...	9		Dec. „ ...	Dec. „ ...		2	
	153	Broach T.C.	37,281	1st Aug. „ ...	30th „ „ ...	113	30·31	Aug. „ ...	Aug. „ ...	...	...	...
	154	Jambusar „	11,479	13th „ „ ...	10th Sept. „ ...	11	9·58	„ „ ...	„ „ ...	...	...	...
Kaira.	155	Mehmadabad R.C. ...	76,296	10th Oct. „ ...	18th Dec. „ ...	3	0·39	Sept. „ ...	Sept. „ ...	59	2	57
	156	Nadiád „ ...	133,152	7th Nov. „ ...	„ „ „ ...	10	0·75	Nov. „ ...	Nov. „ ...	92	2	90
	157	A'nand „ ...	154,118	23rd June „ ...	12th Aug. „ ...	6	0·39	Aug. „ ...	Aug. „ ...	74	2	72
	158	Thásra „ ...	84,868	13th July „ ...	21st Nov. „ ...	166	19·56	Oct. „ ...	Oct. „ ...	97	8	89
	159	Mátar „ ...	78,279	8th Nov. „ ...	17th Dec. „ ...	70	8·94	Nov. „ ...	Nov. „ ...	81	9	72
	160	Kaira T.C.	12,840	10th Aug. „ ...	24th Oct. „ ...	11	8·70	Oct. „ ...	Oct. „ ...	...	...	...
	161	Nadiád „	28,304	5th „ „ ...	21st Nov. „ ...	1	0·35	Nov. „ ...	Nov. „ ...	...	...	...
	162	Borsad „	12,924	29th Sept. „ ...	30th Sept. „ ...	3	2·45	Sept. „ ...	Sept. „ ...	...	...	...
	163	Kapadvanj „	14,442	11th Nov. „ ...	18th Nov. „ ...	11	7·63	Nov. „ ...	Nov. „ ...	...	...	...
Panch Mahals.	164	Kálol R.C.	43,269	19th Sept. „ ...	12th Oct. „ ...	26	6·01	Sept. „ ...	Sept. „ ...	66	4	62
	165	Hálol „	33,253	21st „ „ ...	8th Nov. „ ...	32	9·62	Oct. „ ...	Oct. „ ...	156	3	153
	166	Godhra T.C.	18,342	25th June „ ...	25th June „ ...	1	0·75	June „ ...	June „ ...	...	...	...
Ahmedabad.	167	Daskrohi R.C.	143,942	8th Sept. „ ...	12th Nov. „ ...	20	1·38	Nov. „ ...	Nov. „ ...	137	9	128
	168	Sánand „	76,964	7th „ „ ...	19th Dec. „ ...	22	2·86	„ „ ...	„ „ ...	85	3	82
	169	Parántij „	107,554	23rd Oct. „ ...	10th Nov. „ ...	45	4·19	„ „ ...	„ „ ...	161	1	160
	170	Dholka „	93,476	26th April „ ...	28th April „ ...	1	0·11	April „ ...	April „ ...	117	1	116
	171	Ahmedabad T.C. ...	124,767	3th Aug. „ ...	„ Oct. „ ...	42	3·37	Sept. „ ...	Sept. „ ...	...	...	...
	172	Dholka „ ...	17,716	5th Nov. „ ...	15th Nov. „ ...	8	4·51	Nov. „ ...	Nov. „ ...	...	...	...
	173	Ahmedabad Ct. ...	2,854	11th Sept. „ ...	11th Sept. „ ...	2	7·01	Sept. „ ...	Sept. „ ...	...	...	...
Karachi.	174	Tatta R.C.	39,750	13th March „ ...	13th March „ ...	...	...	March „ ...	March „ ...	Information not available.	1	...
Shikárpur.	175	Sukkur R.C.	51,238	4th Aug. „ ...	15th Aug. „ ...	20	3·90	Aug. „ ...	Aug. „ ...	Information not available.	1	...
	176	Kambar „	*151,489	25th Sept. „ ...	12th Oct. „ ...	72	4·75	Sept.-Oct. „ ...	Sept.-Oct. „ ...		6	...
	177	Sukkur T.C.	27,389	16th Aug. „ ...	27th Sept. „ ...	96	35·05	Aug. „ ...	Aug. „ ...	...	...	...
	178	Lárkhána „	13,188	21st „ „ ...	17th „ „ ...	13	9·86	Sept. „ ...	Sept. „ ...	...	...	...

* The population shown against Kambar includes the population of the Kambar, Ratodero and Shahdádpur tálukás; it is not obtainable for each separately. The cholera death-rate therefore is calculated on this population.

Cholera map.

74. The map illustrates the distribution of, and mortality from, cholera, in the different registration circles, in which the disease was present. As usual, a statement is embodied for easy reference, showing in each district the area, population, density per square mile, number of registration circles and villages, number of villages affected by cholera, deaths from different causes, birth and death-rates per 1,000 of population, and dates of the first and last cases of cholera. The map has also been coloured in different shades of green according as a high or low death-rate obtained in the affected districts.

Tabular statement showing cholera deaths and meteorological conditions.

75. In the Appendix will be found tabular statements which have been prepared in obedience to the instructions conveyed in Government Resolution, General Department, No. 3797, dated 26th October 1886, showing the daily recorded deaths from cholera and the daily meteorological conditions observed at the nearest observatory. I am unable to comment on the results obtained, as they had not been received at the date of this para. going to press.

Concluding remarks.

76. During the year I took advantage of this epidemic to bring again strongly to the notice of Government the subject of the prevention of cholera and I submitted the following table showing the mortality from this disease in the Presidency of Bombay during the 21 years ending 31st December 1886, arranged according to months :—

SKETCH MAP

TO ILLUSTRATE THE

DISTRIBUTION OF, AND COMPARATIVE MORTALITY

from

CHOLERA

in the

DIFFERENT CIRCLES OF MORTUARY REGISTRATION

OF THE PRESIDENCY OF BOMBAY

During the Year

1887

Scale 40 Miles to 1 Inch

N.B. Figures in black ink show the Number of the Registration Circle. These Numbers are given in Column 6 of the Statement appended to Map. Figures in red ink show the rate of deaths from Cholera per 10,000 of population.

The Additional figures indicate the date of first case in each circle. Thus 8 means 8th July.

STATEMENT SHOWING VITAL STATISTICS &c. IN EACH COLLECTORATE DURING 1887.

Representative Provinces	Collectorates	Area in Square miles	Population	Average population per Square mile	Order of Registration: Circle	Taluka	Mahal	Field	Number of Villages	Nº of Villages affected by Cholera	Number of deaths recorded during quarter from: Cholera	Small pox	Fever	Bowel complaints	Injuries	Other causes	Total	Death rate per 1000 of population	Date of first case of Cholera	Date of last case of Cholera
Bombay Presidency	Ahmedabad	3,960	1,337,270	338.00	1	22	24	2,439	322	3,246	2,670	33,36	9,604	344	1,605	47,172	44.60	30.12	22.2.87	30.11.87
	Kaira	1,940	591,304	304.84	2	10	10	1,029	87	489	330	7,915	3,488	193	2,940	24,866	84.22	31.07	2.5.87	16.12.87
	Thana	3,136	902,303	288.12	3	9	10	1,600	1,170	80	80	10,50	2,207	186	2,640	15,607	51.32	23.01	2.4.87	30.12.87
	Bombay City	22	773,196	35,145.27	4		1			382	767	4,05	1,090	249	13,322	20,052	26.00	26.07	29.3.87	23.12.87
	Poona	5,891	855,830	145.26	5	7	10	1,009	19	334	31	1,08	896	174	2,903	40,944	23.01	21.07	11.4.87	30.12.87
	Ahmednagar	4,086	912,720	223.40	6	17	19	2,024	3,33	2,208	37	10,06	2,53	7	3,870	16,972	18.60	18.11	11.4.87	11.12.87
	Dharwar	4,249	900,555	211.90	7	8	12	1,089	1,04	1,028	90	17,34	1,951	208	4,397	23,984	26.64	30.12	25.3.87	31.12.87
	Belgaum	4,621	1,124,605	243.40	8	7	10	909	2,02	2,386	3	17,52	1,653	108	2,830	22,026	19.58	24.12	25.3.87	31.12.87
	Satara	4,560	1,062,230	232.94	9	12	13	2,264	414	4,007		12,05	2,802	222	4,896	20,975	19.75	23.06	7.4.87	30.12.87
	Sholapur	4,875	891,000	182.77	10	8	10	1,215	35	245	18	8,05	1,767	180	5,690	16,104	18.08	26.12	2.4.87	30.12.87
	Ratnagiri	4,627	846,694	182.93	11	7	11	1,033	69	298	1	11,35	2,845	130	2,036	15,991	18.88	29.10	2.4.87	30.12.87
	Dharwar	4,656	893,905	191.97	12	10	13	1,201	17	416	13	19,06	2,038	238	5,530	26,820	30.13	29.07	30.3.87	31.12.87
	Kaira	3,370	834,935	247.80	13	8	10	1,035	247	1,002	3	10,38	2,238	124	2,027	15,790	18.90	29.07	1.4.87	31.12.87
	Kanara	3,811	212,840	107.85	14	18	18	1,017	3	3	2	4,17	424	255	3,108	8,318	39.08	26.06	4.10.87	1.10.87
	Panch Mahals	1,681	174,242	103.70	15	4	5	390	80	303	107	1,862	2,087	102	1,963	16,121	92.49	10.12	18.2.87	31.12.87
	Broach	1,963	336,000	171.04	16	8	8	305	44	341	41	10,94	330	124	1,330	12,844	38.22	29.07	4.8.87	22.12.87
	Surat	1,600	616,000	385.00	17	9	10	377	33	341		10,16	232	232	3,007	13,676	22.19	30.12	28.8.87	31.12.87
	Panch Mahals	1,862	133,972	71.94	18	3	3	412	7	40	15	4,62	31	108	187	5,048	37.68	29.10	16.8.87	31.12.87
	Ahmedabad	3,812	646,324	169.50	19	7	13	827	19	141	9	12,06	1,248	222	3,090	21,095	32.62	29.08	18.4.87	19.12.87
	Baroda	19,011	470,000	24.73	1	10	11	721	7		2	4,13	194	230	1,520	8,230	17.51	17.09	18.8.87	
	Hyderabad	9,000	794,624	83.27	1	13	13	1,194			99	10,83	94	321	107	11,377	27.32	12.06		
	Thar & Parkar	17,176	102,344	5.96	1	5	6	78			7	3,44	63	449	143	3,827	37.37	09.06		
	Shikarpur	10,947	622,496	56.89	2	10	10	1,230	7	320	160	13,07	181	941	201	14,514	23.17	06.07	4.8.87	27.10.87
	Upper Sind Frontier	5,698	124,181	21.80	3	3	4	642			1	1,15	37	24	27	1,273	10.25	11.06		
	Presidency	174,797	16,909,419	152.56	26	172	240	24,251	2,749	23,711	3,743	188,72	45,104	4,848	60,811	302,531	26.16	27.47	22.2.87	24.12.87

Govt. Central Press, Office Press, 1888.

Statement showing the Mortality from Cholera in the Bombay Presidency by months from 1866 to 1886 inclusive.

Months.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	Total.
January ...	160	56	64	1,039	62	351	61	61	2	1	899	3,734	735	78	418	79	272	28	207	709	83	9,139
February ...	1,026	76	60	999	25	237	82	100	...	1	1,453	4,488	616	18	110	47	297	1	110	743	2	10,491
March... ..	2,466	53	69	1,676	30	174	113	35	4	10	3,510	6,887	1,580	21	15	23	351	18	414	1,294	1	18,770
April	2,705	86	61	6,406	23	187	237	34	8	705	3,773	8,114	6,415	64	18	20	734	936	387	1,144	1	32,181
May	4,107	64	79	9,761	56	401	1,998	24	13	5,359	5,312	8,299	9,964	1,176	4	244	1,835	5,632	559	3,481	5	57,735
June	3,905	97	79	9,566	67	894	3,127	10	1	10,374	4,168	8,320	10,950	2,684	2	1,499	1,170	9,447	1,705	9,310	2	77,287
July	2,036	216	405	8,818	41	1,005	3,952	6	3	12,906	4,423	7,673	7,891	1,088	2	2,618	908	12,708	2,738	11,450	8	81,875
August ...	3,600	2,507	871	4,443	158	1,014	3,991	3	1	8,600	3,371	5,143	5,928	510	8	6,568	1,156	6,783	2,746	4,834	11	62,255
September ...	2,043	1,386	1,237	3,433	265	555	2,145	3	3	3,403	1,421	1,874	1,882	401	10	3,327	612	1,290	1,065	1,690	28	28,753
October ...	748	314	1,890	3,724	596	598	611	3	2	3,548	858	1,110	434	541	3	1,403	362	695	1,626	1,689	16	20,771
November ...	128	87	1,048	1,117	898	174	174	2	...	1,640	833	813	254	133	2	500	146	346	1,100	654	3	10,098
December ...	82	201	452	278	453	181	71	2	...	819	2,087	797	83	173	92	266	41	146	556	199	7	6,991
Total ...	23,027	5,143	6,347	52,330	2,665	5,821	15,642	283	37	47,555	32,117	57,252	46,743	6,937	684	16,694	7,904	37,954	13,804	37,287	167	416,394

77. This table contains very many points of great interest and the law regarding the monthly and annual incidence of the disease is well shown in it. Every law of course is proved by its exceptions, but taking the totals for each month it comes out very distinctly that as regards the Bombay Presidency at all events, the prevalence of cholera is to a certain extent coincident with the rise of temperature and moisture in the atmosphere, although it is certain that other factors which in my opinion will hereafter be found to be connected with electricity are necessary before the disease can become active. It exhibits least intensity in the month of December. It increases slightly in January and February but commences in March and April to show marked development, but in May and June it increases by rapid strides and in July attains its maximum intensity for the year. In August a decided fall takes place and in October and November it gradually subsides until as before noticed it reaches the minimum intensity in December.

Laws of cholera.

78. Another point very clearly brought out in the above table is the cycle in which the disease seems to run; for although, as has often been noticed before, there appears to be a period of lessened intensity every second or third year, the cycle of minimum intensity is not reached until the 6th year. For example, whilst the annual mean number of deaths in the above 21 years was 19,828, the following table will show the sexennial years of minimum intensity :—

Sexennial cycle.

1868	...	...	...	...	6,347 deaths.
1874	...	...	...	...	37 „
1880	...	...	...	...	684 „
1886	...	...	...	...	167 „

In 1867 there were only 5,143 deaths; but this aberration only proves the rule, and it will be interesting for those who come after me to see whether 1892 will be a year of minimum intensity. From the facts before me I believe it will.

79. In order to see whether during this period of 21 years cholera had decreased in severity I divided the aggregate deaths in this period into 3 groups of 7 years each :—

Period.	1st Period, 1866 to 1872.	2nd Period, 1873 to 1879.	3rd Period, 1880 to 1886.
Aggregate deaths	110,976	190,924	114,494

In the second period are included the three years of famine, which account for the very great mortality in it; but it will be remarked that during the last period ending 1886 a greater mortality from cholera took place than during the first period, thus proving conclusively that no improvement has followed the measures which have up to this time been adopted to arrest the ravages of the disease.

A higher mortality from cholera of late years.

80. This might have been predicated, for no "preventive" measures have up to the present time ever been taken to improve the conditions which we know are favourable to the development of the disease and which it is believed are

No preventive measures taken.

foremost among exciting causes. Whenever an outbreak of cholera actually takes place spasmodic efforts are made to control it, but only "palliative" measures are then possible, and, in fact, nothing is done beyond giving a little medicine to a comparatively small number of the sufferers, and some (at that time injudicious) disturbance of filth takes place in the villages under the idea that something must be done; but nothing checks the disease until it gradually dies out of itself.

Only palliative measures taken.

81. The above table shows how terrible the waste of human life has been from this preventible disease. It only notices the deaths and takes no account of those persons who were attacked by the disease and who eventually recovered. I am afraid Government cannot divest itself of grave responsibility in this matter, because although the subject of prevention of cholera has during these years been repeatedly pressed on its notice, it has not ordered any effective measures to be taken with regard to the sanitation of villages such as in its Resolution No. 1154, dated 29th March 1886, it has declared *to be absolutely necessary and practicable at all times.*

Government has taken no action.

82. Cholera is essentially like all other spreading diseases preventible, and that it is so will be seen from the following table, which shows the mortality in the City of Bombay for the 30 years ending 31st December 1886:—

Deaths in City of Bombay.

Years.	January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November.	December	Total.
1857... ...	459	165	306	363	249	392	157	86	32	31	18	13	2,181
1858... ...	19	9	8	15	11	9	5	8	11	6	7	7	115
1859... ...	9	10	9	7	69	843	329	170	41	85	131	282	1,985
1860... ...	289	332	396	321	163	107	89	128	51	47	29	9	1,961
1861... ...	15	18	5	4	12	18	13	10	11	34	35	466	641
1862... ...	625	240	339	266	367	218	117	95	161	272	201	269	3,170
1863... ...	89	50	89	161	153	161	412	240	178	181	176	319	2,209
1864... ...	622	401	302	689	837	395	371	351	232	88	137	431	4,847
1865... ...	363	540	522	356	624	206	116	62	31	32	22	13	2,887
1866... ...	13	15	12	16	21	15	27	43	63	49	31	27	332
1867... ...	11	21	12	26	5	9	5	5	7	6	4	...	111
1868... ...	1	...	...	3	3	2	4	6	1	43	63	101	227
1869... ...	157	93	97	91	82	41	54	47	60	26	3	3	754
1870... ...	6	3	5	3	7	12	4	73	76	41	64	92	386
1871... ...	68	41	37	24	15	10	3	11	13	29	8	4	263
1872... ...	7	2	4	7	6	7	46	54	32	11	3	11	190
1873... ...	22	13	17	12	8	7	3	1	2	3	2	2	92
1874... ...	1	...	2	2	7	...	2	1	2	2	...	...	19
1875... ...	1	1	...	31	67	132	279	168	43	53	38	21	834
1876... ...	1	...	2	4	5	9	119	141	64	23	6	...	374
1877... ...	1	61	111	185	337	704	495	337	162	42	21	54	2,510
1878... ...	35	109	224	128	137	99	156	116	43	53	40	25	1,165
1879... ...	27	10	13	4	29	14	33	74	64	41	10	4	323
1880... ...	8	6	3	2	2	2	1	1	1	2	1	1	30
1881... ...	...	..	2	9	68	85	111	73	48	33	9	91	529
1882... ...	80	52	17	5	1	...	12	12	8	2	...	1	190
1883... ...	2	1	1	15	84	34	231	429	152	24	4	37	1,014
1884... ...	99	32	33	7	70	19	8	73	92	46	49	40	568
1885... ...	49	80	149	109	62	22	45	32	19	11	1	2	581
1886... ...	3	2	...	1	2	2	...	...	3	...	1	3	17
Total ...	3,082	2,307	2,717	2,857	3,503	3,484	3,247	2,847	1,703	1,316	1,114	2,328	30,505

83. This table also exemplifies the law that every 6th year is a year of minimum intensity, and in considering the lesson it teaches, it must be stated, that the Municipality of Bombay was created on the 1st July 1865, and for the 1st time in the history of the island the surface underwent a systematic cleansing, which has been more or less efficiently maintained ever since, and it is gratifying to notice in the above table the persistent fall in the mortality from cholera which has since resulted. In the series of 30 years it will be seen that during the 9 years ending 1865 there were 19,996 deaths from cholera against 10,509 in the 21 years ending 1886.

Diminution of cholera coincident with cleansing of surface.

84. As far as the city of Bombay, therefore, is concerned, cholera has ceased to be the formidable disease it used to be (though even yet there are too many deaths from it); but the chief factor in reducing the mortality has been the introduction of *cleanliness.* I shall in another portion of the report speak of

the measures which I consider necessary to introduce cleanliness into the villages, but I may say at once that until cleanliness is introduced into every village in the Presidency, or rather, I should say, throughout India, it is perfectly hopeless to expect that epidemics of this preventible disease will not arise. If it is introduced, as I hope it will be, it is a matter of mathematical certainty that not only will epidemics of cholera cease to exist, but that all other diseases and notably fevers, will lose their intensity, and the death-rate among the rural population will be considerably reduced to what it is now.

Cleanliness in villages.

85. I should also say here that when cholera is in movement the disturbance of filth does more harm than good. The only measures then to take are to conserve, as far as possible, the water-supply and to cover up all exposed filth with fresh earth, and to remove the people from the affected place.

Measures when an outbreak of cholera takes place.

86. When the disease is in movement something, however, may be done in the way of precautionary measures. For example, I have before brought to the notice of Government my strongest opinion that the present measures ordered by Government to be taken on the occurrence of an outbreak of cholera are insufficient and are not calculated to arrest the disease. In my letter to Government, No. 3858 B., dated 9th December 1884, I said,—"I have the honour to state that in times when cholera is in movement, there is usually, though not always, a period in which a preliminary diarrhœal tendency is observed throughout an affected community. I regard it as of the highest importance that greater facilities than have up to this time existed should be placed at the command of villagers with the object of obtaining medicine to check this premonitory diarrhœa. For these reasons rules 5 and 6 were inserted by me in the instructions for the guidance of villagers regarding measures to be taken with reference to outbreaks of cholera. Unless the premonitory diarrhœa is checked, the disease may, when the cholera-producing influence becomes more intense, develop into cholera, and many lives in each cholera outbreak are lost because nature's warning has not been attended to in time." * * * "I would urge on Government the desirability of keeping with the Pátel of every village medicine, whether in the form of pills or mixture, for the purpose of checking diarrhœa in its earliest stage during such time as cholera is known to be in movement and approaching the district in which such village is situated."

Present measures ordered by Government ineffective.

87. I am sorry to say Government did not approve of my suggestion, and in Government Resolution, General Department, No. 19 dated 5th January 1885, ruled that "the Governor in Council is of opinion that it will suffice if in tálukás where outbreaks of cholera are of frequent occurrence a supply of the cholera mixture, which should not be less than six bottles, should be maintained at the head-quarter town, and a supply of not less than two bottles should be kept at each Police station. It is barely practicable to keep a supply of cholera medicines in every village. The Pátels of villages should at once report to the nearest Police station whenever cholera appears in their village or diarrhœa becomes prevalent. When such report is made the officer in charge of the Police station should at once give cholera mixture to the Pátel with directions for its use and apply for a fresh supply."

Government orders on the subject.

88. Such measures can never in my opinion be of the slightest avail. How can a man suffering with diarrhœa be expected to walk perhaps five miles to the nearest Police station and then five miles back to his village. Every minute is of the most vital importance, and if a messenger is sent, the disease will probably have developed into cholera before the medicine would reach the village. Who that knows anything about village life would ever expect a village Pátel to give notice to the nearest Police station when diarrhœa becomes prevalent in his village? I would, therefore, earnestly hope that Government may be pleased to reconsider the question and to order suitable medicine to be kept in *every village* so as to be ready to be given at a moment's notice to persons affected with diarrhœa. This course, if adopted, would, I have no doubt, do some good, but

Question should be re-considered.

no *palliative* measures of this sort ought to be allowed to supersede the only really efficient course, *viz.*, prevention by the introduction of *cleanliness* into every village in the Presidency.

SMALL-POX.

Small-pox mortality by sexes.

89. During 1887, the deaths from small-pox of 1,945 males and 1,808 females, or a total of 3,753 persons, were recorded against 876 in 1886 and a decennial mean of 6,747.

Small-pox deaths since 1876.

90. The number of deaths registered from this disease in each year since 1876 is as follows :—

Years.	Number of Deaths.	Years.	Number of Deaths.
1876	11,817	1882	1,630
1877	27,369	1883	13,404
1878	4,475	1884	14,438
1879	1,156	1885	2,646
1880	940	1886	876
1881	539	1887	3,753
	46,296		36,747

The number of deaths in 1887 was greater than in the previous two years, although far below the mortality recorded in 1883 and 1884.

Deaths by Districts and Collectorates.

91. The following table shows the deaths during 1887 arranged according to Registration Districts and Collectorates :—

District.	Number.	Collectorate.	Population according to Census of 1881.	Deaths from Small-pox in					
				Mean for 10 years from 1877 to 1886.	Ratio per 1,000 of Population.	1886.	Ratio per 1,000 of Population.	1887.	Ratio per 1,000 of Population.
Western Registration District.	1	Khándesh	1,237,231	900	0·78	277	0·22	2,678	2·16
	2	Násik...	781,206	475	0·63	9	0·01	219	0·28
	3	Thána	807,367	369	0·45	13	0·02	50	0·06
	4	Bombay	773,196	374	0·52	18	0·02	110	0·14
	5	Kolába	482,830	184	0·43	34	0·07	72	0·15
Central Registration District.	6	Ahmednagar	751,228	244	0·32	...	...	57	0·07
	7	Poona	900,621	369	0·41	14	0·02	96	0·16
	8	Sholápur	582,487	163	0·26	6	0·01	2	...
	9	Sátára	1,062,350	265	0·25	1	...	...	...
	10	Ratnágiri	997,090	377	0·37	29	0·03	18	0·02
Southern Registration District.	11	Belgaum	864,014	438	0·49	7	0·01	2	...
	12	Dhárwár	882,907	631	0·68	76	0·08	53	0·06
	13	Bijápur	638,493	334	0·47	9	0·01	5	0·01
	14	Kánara	421,840	240	0·58	78	0·18	2	...
Eastern Gujarát Registration District.	15	Surat...	614,198	380	0·62	12	0·02	117	0·19
	16	Broach	326,930	135	0·40	11	0·03	47	0·14
	17	Kaira...	804,800	148	0·19	6	0·01	...	...
	18	Panch Maháls	255,479	42	0·17	30	0·12	13	0·05
	19	Ahmedabad	856,324	168	0·20	...	...	9	0·01
Sind Registration District.	20	Karáchi	478,688	116	0·25	7	0·01	2	...
	21	Hyderabad	754,624	213	0·29	79	0·10	46	0·06
	22	Thar and Párkar	203,344	12	0·06	...	...	7	0·03
	23	Shikárpur	852,986	149	0·18	148	0·18	148	0·18
	24	Upper Sind Frontier ...	124,181	21	0·19	12	0·10	...	...

ABSTRACT.

Western Registration District	4,081,830	2,302	0·59	351	0·09	3,129	0·77
Central do.	4,293,776	1,418	0·33	50	0·01	173	0·04
Southern do.	2,807,254	1,643	0·56	170	0·06	62	0·02
Eastern Gujarát do.	2,857,731	873	0·31	59	0·02	186	0·07
Sind do.	2,413,823	511	0·22	246	0·10	203	0·08
Total ...	16,454,414	6,747	0·41	876	0·05	3,753	0·23

By Districts.

From the above table it will be noticed that the disease was principally confined to the Western Registration District where it attained a ratio of 0·77 per 1,000 against 0·09 in 1886 and a decennial mean of 0·59. In Sind Registration District the ratio was 0·08 against 0·10 in the previous year, and 0·22 the decennial mean. In the Eastern Gujarát Registration District it was 0·07 against 0·02 in the previous year, and a decennial mean of 0·31. In the Central Registration District and the Southern Registration District the ratios per 1,000 of population were respectively 0·04 and 0·02 against 0·01 and 0·06, and the decennial mean of 0·33 and 0·56. In the Collectorates, the highest ratios—2·16, 0·28, 0·19 and 0·18—took place respectively in Khándesh, Násik, Surat and Shikárpur Collectorates, and in 2 Collectorates *viz.*, Bijápur and Ahmedabad, there was a ratio of 0·01 per 1,000 in each. Only 2 deaths from this disease were recorded in the Sholápur, Belgaum, Kánara and Karáchi Collectorates respectively, while in Sátára, Kaira and Upper Sind Frontier not a single death occurred.

By Collectorates.

Deaths by ages.

92. In the following table the deaths are shown by age and months, the latter being contrasted with the corresponding months of 1886 and with the mean of the previous five years. In 1887, 29·48 per cent. of these deaths occurred among infants under 1 year of age, whilst 60·96 per cent. took place among children over 1 and under 12, the remaining 9·56 per cent. being among persons over that age :—

		January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Total Deaths from small-pox in each month.	5 years' mean...	667	932	1,178	1,044	753	549	353	240	171	130	188	392	6,597
	1886	66	76	99	102	153	107	76	54	18	17	29	79	876
	1887	165	438	868	962	539	252	126	69	42	52	97	143	6,753
Deaths under 1 year.	5 years' mean...	203	271	366	323	214	123	85	63	45	36	46	103	1,878
	1886	12	17	20	34	40	18	19	15	4	8	13	31	231
	1887	53	113	246	314	160	65	39	18	13	10	30	45	1,106
Above 1 and under 12 years.	5 years' mean...	312	427	538	459	316	192	136	95	69	51	66	173	2,834
	1886	19	30	42	34	54	51	33	31	8	9	8	43	362
	1887	90	293	568	609	329	134	58	35	18	25	52	77	2,288
Above 12 years.	5 years' mean...	152	234	274	262	223	234	132	82	57	43	76	116	1,885
	1886	35	29	37	34	59	38	24	8	6	...	8	5	283
	1887	22	32	54	39	60	53	29	16	11	17	15	21	359

Monthly distribution.

93. In December 1886, 79 deaths were registered throughout the Presidency and in January 1887 the number rose to 165. The disease reached its maximum intensity (962) in April, after which date it commenced to decline and the minimum (42) was registered in September ; but the setting in of the cold weather, as usual, appeared to favour the development of the disease, as the deaths rose to 143 or 101 more than the number recorded in September.

FEVER.

Fever mortality by sexes.

94. During 1887, 160,726 males and 147,996 females, or a total of 308,722 persons, were reported to have died from fever against 281,450 in 1886. The increase therefore for the year under report as compared with 1886 amounted to 27,272 deaths, whilst the mean for the previous 10 years is 288,280.

Deaths since 1876.

95. The number of deaths registered from fever in each year since 1876 is as follows :—

Years.	Number of Deaths from Fever.	Years.	Number of Deaths from Fever.
1876	220,833	1882...	243,454
1877	336,865	1883...	266,741
1878	357,376	1884...	276,989
1879	286,526	1885...	314,237
1880	246,779	1886...	281,450
1881	272,403	1887...	308,722
Total for six years ...	1,720,782	Total for six years ...	1,691,593
Mean ...	286,797	Mean ...	281,932

Deaths by Districts and Collectorates.

96. In the following table these deaths are shown by Districts and Collectorates :—

Districts.	No.	Collectorates.	Population according to Census of 1881.	Deaths from Fever in					
				Mean for 10 years from 1877 to 1885.	Ratio per 1,000 of Population.	1886.	Ratio per 1,000 of Population.	1887.	Ratio per 1,000 of Population.
Western Registration District.	1	Khándesh	1,237,231	22,126	19·18	28,330	22·90	32,584	26·34
	2	Násik	781,206	15,610	20·73	14,042	17·97	17,652	22·60
	3	Thána	807,367	14,322	17·39	14,745	18·26	15,265	18·91
	4	Bombay	773,196	7,527	10·43	5,843	7·56	5,613	7·26
	5	Kolába	482,830	7,210	16·77	7,871	16·30	7,888	16·34
Central Registration District.	6	Ahmednagar	751,228	15,025	19·76	15,107	20·11	16,788	22·35
	7	Poona	900,621	15,077	16·69	14,772	16·40	17,966	19·95
	8	Sholápur	582,487	11,901	18·69	11,358	19·50	13,296	22·83
	9	Sátára	1,062,350	21,232	20·00	20,897	19·68	23,031	21·68
	10	Ratnágiri	997,090	10,188	10·13	9,309	9·34	8,803	8·83
Southern Registration District.	11	Belgaum	864,014	15,146	16·94	10,544	12·20	11,352	13·14
	12	Dhárwár	882,907	17,839	19·29	14,928	16·90	14,851	16 82
	13	Bijápur	638,493	13,739	19·36	8,043	12·60	10,383	16·26
	14	Kánara	421,840	7,964	19·31	7,310	17·33	6,571	15·57
Eastern Gujarát Registration District.	15	Surat	614,198	12,395	20·27	12,580	20·48	13,257	21·58
	16	Broach	326,930	9,094	27·04	8,527	26 08	10,916	33·39
	17	Kaira	804,800	19,274	24·21	16,597	20·62	20,543	25 52
	18	Panch Mahále	255,479	4,512	18·08	5,137	20·11	6,929	27·12
	19	Ahmedabad	856,324	19,511	23 08	17,776	20·76	20,188	23·58
Sind Registration District.	20	Karáchi	478,688	5,880	12·88	6,721	14·04	6,371	13·31
	21	Hyderabad	754,624	9,065	12·22	13,261	17·60	10,977	14·55
	22	Thar and Párkar	203,344	2,771	14·26	2,990	14·70	3,114	15·31
	23	Shikárpur	852,986	9,939	12·07	13,368	15·67	13,026	15·27
	24	Upper Sind Frontier ...	124,181	933	8·44	1,394	11·23	1,358	10·94

ABSTRACT.

Western Registration District	4,081,830	66,795	17·21	70,831	17·35	79,002	19·35
Central do.	4,293,776	73,423	16·80	71,443	16·64	79,884	18·60
Southern do.	2,807,25[illegible]	54,688	18·70	40,825	14·54	43,157	15·37
Eastern Gujarát do.	2,857,731	64,786	22·82	60,617	21·21	71,833	25·13
Sind do.	2,413,823	28,588	12·29	37,734	15·63	34,846	14·43
Total ...	16,454,414	288,280	17·63	281,450	17·10	308,722	18·76

By Districts.

In the Eastern Gujarát Registration District fever caused a higher mortality (25·13 per 1,000) during the year than in 1886 (21·21) and the decennial mean (22·82). In the Western Registration District the death-rate was 19·35 against 17·35 in the previous year, and the decennial mean 17·21. In the Central Registration District the ratio was 18·60 against 16·64 in 1886, and 16·80 the decennial mean. In the Southern Registration District the ratio was 0·83 higher than 1886 but 3·33 less than the decennial mean. In Sind Registration District the rate for the year (14·43) was less than in 1886 (15·63) but higher than the decennial mean (12·29).

By Collectorates.

By Collectorates, excepting in Bombay, Ratnágiri, Dhárwár, Kánara, Karáchi, Hyderabad, Shikárpur and Upper Sind Frontier, there was an increase in the ratios during the year over 1886. The Collectorate of Broach heads the list with a very high ratio of 33·39 against 26·08 in 1886 and 27·04 in the previous 10 years, and in the following Collectorates high rates are observed: Panch Maháls 27·12, Khándesh 26·34, Kaira 25·52, Ahmedabad 23·58, Sholápur 22·83, Násik 22·60, Ahmednagar 22·35, Sátára 21·68 and Surat 21·58, the Presidency rate being 18·76 against 17·10 in the previous year and 17·63 the deceminal mean.

Deaths by months.

97. The table in the margin shows the monthly distribution of these deaths as compared with the mean and corresponding months of 1886. From February to October and in December the deaths from fever were both above the mean and the corresponding months in 1886. The maximum mortality from fever took place in November, when 29,042 deaths were reported and the minimum in February when 22,144 deaths were recorded.

Months.	Mean for 10 years from 1877 to 1886.	1886.	1887.
January ...	24,403	25,311	24,282
February ...	21,198	22,060	22,144
March ...	22,488	22,623	23,189
April ...	21,476	22,193	24,138
May ...	21,390	22,084	23,573
June ...	19,897	19,499	23,732
July ...	22,646	22,239	25,120
August ...	25,859	25,799	28,455
September ...	25,735	25,733	28,740
October ...	26,584	23,308	28,670
November ...	29,170	24,565	29,042
December ...	27,434	26,036	27,637
Total ...	288,280	281,450	308,722

BOWEL-COMPLAINTS.

Deaths from Bowel-complaints by sexes.

98. During 1887, bowel-complaints caused the deaths of 23,363 males and of 19,271 females, or a total of 42,634 persons against 36,612 in 1886, and a decennial mean of 36,385.

Deaths since 1876.

99. The number of deaths reported from bowel-complaints in each year since 1876 is as follows:—

Years.	Number of Deaths from Bowel-complaints.	Years.	Number of Deaths from Bowel-complaints.
1876 ...	33,683	1882 ...	28,353
1877 ...	60,257	1883 ...	35,292
1878 ...	41,165	1884 ...	35,983
1879 ...	26,349	1885 ...	45,056
1880 ...	24,452	1886 ...	36,612
1881 ...	30,342	1887 ...	42,634
Total for six years ...	216,248	Total for six years ...	223,930
Mean ...	36,041	Mean ...	37,322

Deaths by Districts and Collectorates.

100. The following table shows these deaths arranged by Districts and Collectorates:—

Districts.	Number.	Collectorates.	Population according to Census of 1881.	Deaths from Bowel-complaints in: Mean for 10 years from 1877 to 1886.	Ratio per 1,000 of Population.	1886.	Ratio per 1,000 of Population.	1887.	Ratio per 1,000 of Population.
Western Registration District.	1	Khándesh ...	1,237,231	4,386	3·80	5,300	4·28	6,604	5·34
	2	Násik ...	781,206	1,939	2·57	1,864	2·39	3,019	3·87
	3	Thána ...	807,367	296	0·36	419	0·52	926	1·15
	4	Bombay ...	773,196	2,073	2·87	1,465	1·89	1,596	2·06
	5	Kolába ...	482,830	241	0·56	363	0·75	640	1·33
Central Registration District.	6	Ahmednagar ...	751,228	1,955	2·57	1,873	2·49	2,535	3·37
	7	Poona ...	900,621	1,565	1·73	1,354	1·50	1,921	2·13
	8	Sholápur...	582,487	1,676	2·63	1,097	1·88	1,437	2·47
	9	Sátára ...	1,062,350	2,789	2·63	2,444	2·30	2,812	2·65
	10	Ratnágiri ...	997,090	1,429	1·42	1,772	1·78	1,971	1·98

District.	Number.	Collectorates.	Population according to Census of 1881.	Deaths from Bowel-complaints in. Mean for 10 years from 1877 to 1886.	Ratio per 1,000 of Population.	1886.	Ratio per 1,000 of Population.	1887.	Ratio per 1,000 of Population.
Southern Registration District.	11	Belgaum...	864,014	3,729	4·17	4,352	5·04	5,815	6·73
	12	Dhárwár	882,907	4,738	5·12	4,792	5·43	5,175	5·86
	13	Bijápur	638,493	1,661	2·34	1,505	2·35	2,279	3·57
	14	Kánara	421,840	1,048	2·54	748	1·77	624	1·48
Eastern Gujarát Registration District.	15	Surat	614,198	1,599	2·62	1,789	2·92	2,067	3·36
	16	Broach	326,930	620	1·84	535	1·63	280	0·85
	17	Kaira	804,800	2,243	2·81	2,424	3·01	975	1·21
	18	Panch Mahále	255,479	307	1·23	109	0·43	71	0·27
	19	Amedabad	856,324	1,562	1·85	1,890	2·21	1,349	1·57
Sind Registration District.	20	Karáchi	478,688	172	0·38	206	0·43	244	0·51
	21	Hyderabad	754,624	90	0·12	104	0·14	94	0·12
	22	Thar and Párkar ...	203,344	24	0·13	30	0·15	13	0·06
	23	Shikárpur	852,986	207	0·25	138	0·16	161	0·19
	24	Upper Sind Frontier ...	124,181	36	0·33	39	0·31	26	0·21

ABSTRACT.

Western Registration District	4,081,830	8,935	2·30	9,411	2 31	12,785	3·13
Central do	4,293,776	9,414	2·16	8,540	1·99	10,676	2·49
Southern do.	2,807,254	11,176	3·80	11,397	4·06	13,893	4,95
Eastern Gujarát do.	2,857,731	6,331	2·23	6,747	2·36	4,742	1·67
Sind do.	2,413,823	529	0·23	517	0 21	538	0·22
Total ...	16,454,414	36,385	2·22	36,612	2·23	42,634	2·59

By Districts.

The Southern Registration District heads the list with a high ratio of 4·95 against 4·06 in 1886 and 3·80, the decennial mean. The Western Registration District comes next with a ratio of 3·13, and next to it is the Central Registration District 2·49, the Eastern Gujarát Registration District 1·67, and Sind with a rate of 0·22. In this Presidency the rate was 2·59 against 2·23 in the previous year and a decennial mean of 2·22. In 16 Collectorates the death-rate was higher and in 8 it was lower than in 1886. The highest ratios were recorded in Belgaum 6·73, Dhárwár 5·86, and Khándesh 5·34, and the lowest in Hyderabad 0·12 and Thar and Párkar 0·06 :—

By Collectorates.

Deaths by Months.

101. The table in the margin shows the monthly distribution of these deaths as compared with the mean and corresponding months of 1886. During the year, excepting January, the deaths from bowel-complaints exceeded those in 1886. The maximum mortality occurred in August and the minimum in February.

Months.	Mean for 10 years from 1877 to 1886.	1886.	1887.
January	2,664	2,992	2,941
February	2,572	2,489	2,546
March	2,130	2,549	2,647
April	2,322	2,612	2,714
May	2,396	2,788	3,160
June	2,167	2,818	3,668
July	2,903	3,537	4,318
August	3,662	4,126	5,371
September	4,482	3,517	4,605
October	4,208	3,141	3,795
November	3,448	2,919	3,329
December	2,931	3,124	3,450
Total ...	36,385	36,612	42,634

INJURIES.

Deaths from Injuries.

102. During 1887, 3,255 males and 2,303 females, or a total of 5,558 persons, met with violent deaths. The mortality from these causes is less by 134 than that reported in 1886, when 5,692 deaths were recorded. Of these 5,558 deaths, 2,245 were caused by drown-

ing, 1,164 resulted from snake-bites, 470 from wounds, 241 from hanging, 162 by poisoning, 84 from attacks by wild beasts, and 1,192 from causes not specified.

Deaths since 1876.

103. The number of deaths registered from injuries in each year since 1876 was as follows:—

Years.	Number of Deaths from Injuries.	Years.	Number of Deaths from Injuries.
1876	5,928	1882	5,913
1877	7,539	1883	5,978
1878	7,550	1884	5,570
1879	7,107	1885	5,577
1880	6,082	1886	5,692
1881	5,950	1887	5,558
Total for six years ...	40,156	Total for six years ...	34,288
Mean ...	6,693	Mean ...	5,715

Deaths from injuries in 1886 and 1887 arranged by sexes.

104. The result of the two last years, arranged by sex, are shown in the following table:—

	1886.			1887.		
	Males.	Females.	Total.	Males.	Females.	Total.
Drowing	1,145	1,289	2,434	1,028	1,217	2,245
Poisoning	119	54	173	98	64	162
Hanging	123	92	215	147	94	241
Wounding	326	148	474	368	102	470
Wild beasts	58	27	85	52	32	84
Snake-bites	752	412	1,164	759	405	1,164
Other causes	774	373	1,147	803	389	1,192
Total ...	3,297	2,395	5,692	3,255	2,303	5,558

It will be seen from the above table that during 1887, under drowning, poisoning, wounding and wild beasts, there is a total decrease of 205 deaths; whilst under hanging and other causes there is an increase of 71 deaths as compared with the result of 1886.

Deaths by Districts and Collectorates.

105. The next table gives the deaths from injuries for each district and Collectorate for 1886 and 1887 and the mean for the previous ten years. The number of deaths during the year in 10 Collectorates is more and in 14 less than the previous year. The highest number of deaths was recorded in Thána (390) and the lowest in the Upper Sind Frontier (34):—

Districts.	No.	Collectorates.	Population according to Census of 1881.	Deaths from Injuries in: Mean for 10 years from 1877 to 1886.	Ratio per 1,000 of Population.	1886.	Ratio per 1,000 of Population	1887.	Ratio per 1,000 of Population.
Western Registration District.	1	Khándesh	1,237,231	285	0·25	270	0·22	341	0·28
	2	Násik...	781,206	156	0·21	135	0·17	143	0·18
	3	Thána	807,367	394	0·48	448	0·55	390	0·48
	4	Bombay	773,196	344	0·48	372	0·48	349	0·45
	5	Kolába	482,830	168	0·39	160	0·33	171	0·35
Central Registration District.	6	Ahmednagar	751,228	168	0·22	96	0·13	73	0·10
	7	Poona	900,621	322	0·36	318	0·35	300	0·30
	8	Sholápur	582,487	207	0·33	145	0·25	108	0·19
	9	Sátára	1,062,350	367	0·34	246	0·23	327	0·31
	10	Ratnágiri	997,090	393	0·39	220	0·22	190	0·19
Southern Registration District.	11	Belgaum	864,014	350	0·39	247	0·29	270	0·31
	12	Dhárwár	882,907	363	0·39	272	0·31	239	0·27
	13	Bijápur	638,493	297	0·42	167	0·26	173	0·27
	14	Kánara	421,840	225	0·55	212	0·50	220	0·52
Eastern Gujarát Registration District.	15	Surat	614,198	270	0·44	285	0·46	252	0·41
	16	Broach	326,930	126	0·38	115	0·35	121	0·37
	17	Kaira	804,800	340	0·43	333	0·41	373	0·47
	18	Panch Mahále	255,479	115	0·46	113	0·44	109	0·43
	19	Ahmedabad	856,324	230	0·27	260	0·30	282	0·33
Sind Registration District.	20	Karáchi	478,688	276	0·60	311	0·65	291	0·61
	21	Hyderabad	754,624	455	0·61	452	0·57	351	0·47
	22	Thar and Párkar	203,344	89	0·46	111	0·55	110	0·54
	23	Shikárpur	852,986	325	0·40	376	0·44	341	0·40
	24	Upper Sind Frontier ...	124,181	31	0·28	28	0·23	34	0·27

ABSTRACT.

Western Registration District	4,081,830	1,347	0·35	1,385	0·33	1,394	0·34
Central do.	4,293,776	1,457	0·33	1,025	0·23	998	0·23
Southern do.	2,807,254	1,235	0·42	898	0·32	902	0·32
Eastern Gujarát do.	2,857,731	1,081	0·38	1,106	0·39	1,137	0·39
Sind do.	2,413,823	1,176	0·51	1,278	0·53	1,127	0·47
Total ...	16,454,414	6,296	0·39	5,692	0·35	5,558	0·34

Snake-bites by months.

106. The monthly distribution of deaths from snake-bites are given in the next table for each year from 1882 to 1887 inclusive. The deaths in 1887 were, as usual, most numerous during the rainy season:—

Months.	Years. 1882.	1883.	1884.	1885.	1886.	Mean for 5 years.	1887.
January	35	34	31	23	29	38	32
February	39	28	27	13	22	33	29
March	47	44	41	37	30	51	42
April	63	53	58	48	55	66	49
May	102	95	79	76	93	108	94
June	149	155	145	148	158	183	159
July	168	179	180	176	156	210	161
August...	189	226	179	176	161	219	157
September	211	181	139	160	180	206	177
October	166	133	117	122	136	161	156
November	71	62	55	80	93	88	77
December	37	25	26	41	51	45	31
Total ...	1,277	1,215	1,077	1,100	1,164	1,408	1,164

Snake-bites by Collectorates.

107. The next statement shows the deaths by localities, and as usual the highest number (150) is from Hyderabad, Thána follows with 129, Kaira with 86, Ahmedabad with 85, Shikárpur with 83 and Karáchi with 81. The minimum mortality occurred in Bombay, where only 3 deaths were reported from snake-bite. The total number of deaths from snake-bites for the Presidency during the year (1,164) is the same as last year but is less by 3 than the mean :—

Collectorates.	Years.						
	1882.	1883.	1884.	1885.	1886.	Mean for 5 years.	1887.
Khándesh	25	24	31	27	15	25	40
Násik	13	14	8	12	20	13	21
Thána	148	120	84	116	163	126	129
Bombay	5	6	1	2	8	4	3
Kolába	40	26	24	39	38	33	48
Ahmednagar	18	14	16	5	7	12	6
Poona	31	28	38	50	37	37	37
Sholápur	10	7	8	11	10	9	16
Sátára	46	49	59	54	42	50	59
Ratnágiri	149	112	120	108	75	113	48
Belgaum	34	30	42	43	33	37	30
Dhárwár	24	27	28	22	27	26	12
Bijápur...	33	35	22	14	15	24	12
Kánara...	22	12	19	18	34	21	22
Surat	49	48	42	36	43	44	39
Broach	35	28	16	21	17	24	31
Kaira	61	77	70	49	62	64	86
Panch Mahále	29	36	34	28	40	33	36
Ahmedabad	64	65	40	51	57	56	85
Karáchi	87	56	63	72	88	73	81
Hyderabad	190	212	151	162	187	180	150
Thar and Párkar ...	78	78	55	66	64	68	78
Shikárpur	77	107	96	89	78	89	83
Upper Sind Frontier ...	9	4	10	5	4	6	12
Total ...	1,277	1,215	1,077	1,100	1,164	1,167	1,164

Details of injuries.

108. In the following table the deaths from injuries are detailed under specified headings, and it will be seen that of the 2,245 deaths by drowning 326 were suicidal, 1,767 accidental and 152 are entered as otherwise. This heading means that, when the return was submitted, these deaths could neither be pronounced suicidal nor accidental. There were 1,152 deaths by drowning in wells against 1,127 in 1886. Of the 662 suicidal deaths 326 were the result of drowning, 89 of taking poison, 219 of hanging and 28 of self-inflicted wounds :—

Detail of Deaths by Violence in the Presidency of Bombay for the year 1887.

No.	Names of Registration Circles.	2. Drowning. Suicidal. Well. Male.	Female.	Total.	Tank. Male.	Female.	Total.	Otherwise. Male.	Female.	Total.	Accidental. Well. Male.	Female.	Total.	Tank. Male.	Female.	Total.	Otherwise. Male.	Female.	Total.	* Otherwise. Well. Male.	Female.	Total.	Tank. Male.	Female.	Total.	Otherwise. Male.	Female.	Total.
1	Khándesh ...	5	10	15	...	1	1	...	1	1	29	63	92	2	1	3	21	22	43	1	2	3	...	...	...	...	...	...
2	Násik ...	4	3	7	...	...	...	...	1	1	14	26	40	3	...	3	19	10	29	1	...	1	...	1	1	2	...	2
3	Thána ...	4	9	13	1	...	1	1	2	3	23	33	56	4	5	9	23	20	43	1	...	1	1	1	2	2	...	4
4	Bombay ...	9	12	21	6	7	13	3	1	4	2	2	4	9	5	14	9	3	12	...	1	1	3	...	3	6	1	7
5	Kolába ...	3	...	3	...	...	...	1	...	1	8	21	29	1	6	7	17	11	28	...	...	...	...	...	...	7	...	7
6	Ahmednagar ...	1	6	7	...	...	...	...	2	2	14	15	29	1	1	2	2	4	6	...	...	...	...	...	...	1	2	3
7	Poona ...	3	7	10	1	...	1	5	4	9	19	47	66	1	...	1	24	13	37	1	1	2	3	1	4	3	6	9
8	Sholápur ...	2	9	11	1	...	1	...	...	...	18	29	47	1	1	2	4	3	7	1	...	1	...	...	...	...	...	...
9	Sátára ...	5	22	27	...	...	...	1	4	5	36	68	104	2	3	5	20	12	32	4	1	5	...	...	...	7	...	7
10	Ratnágiri ...	7	2	3	1	1	2	1	3	4	8	16	24	6	8	14	16	12	28	1	1	2	2	...	2	8	4	12
11	Belgaum ...	7	27	34	...	...	...	1	...	1	21	45	66	8	6	14	11	5	16	1	4	5	...	...	...	2	6	8
12	Dhárwár ...	5	22	27	2	4	6	2	...	3	15	35	50	16	7	23	7	6	13	1	3	4	...	...	...	1	2	3
13	Bijápur ...	7	19	26	1	1	2	1	1	2	16	36	52	3	1	4	8	...	8	1	2	3	...	...	...	2	...	2
14	Kánara ...	...	2	2	...	2	2	...	2	2	9	24	33	7	10	17	33	21	54	1	...	1	...	...	...	8	5	13
15	Surat ...	2	11	13	...	...	...	...	2	2	6	35	41	6	5	11	26	15	41	1	...	1	...	...	...	1	1	2
16	Broach ...	1	2	3	*1	...	1	...	...	...	2	15	17	5	3	8	6	...	6	...	...	...	...	...	...	...	...	...
17	Kaira ...	1	14	15	...	...	...	...	...	...	9	35	44	29	19	48	7	3	10	...	1	1	...	...	...	...	...	...
18	Panch Mahále ...	...	1	1	...	...	...	...	...	...	3	7	10	1	4	5	4	5	9	...	...	...	...	...	...	...	...	...
19	Ahmedabad ...	3	10	13	...	...	...	1	1	1	14	24	38	13	7	20	3	4	7	1	...	1	...	...	...	...	...	...
20	Karáchi ...	...	...	...	...	...	...	...	...	...	5	2	7	20	12	32	31	16	47	...	1	1	1	...	1	3	...	3
21	Hyderabad ...	...	...	...	2	...	2	...	...	...	8	2	10	22	22	54	15	9	24	1	...	1	...	1	1	5	1	6
22	Thar and Párkar ...	...	...	...	...	1	1	...	...	...	6	1	7	4	1	5	3	2	5	...	...	...	...	...	...	...	...	...
23	Shikárpur ...	...	...	...	...	...	...	...	...	...	7	3	10	13	7	20	39	30	69	...	...	...	1	1	2	10	2	12
24	Upper Sind Frontier.	...	...	...	1	...	1	...	...	...	1	...	1	3	1	4	1	...	1	...	...	...	...	...	...	1	...	1
	Total ...	63	188	251	17	17	34	17	24	41	293	574	867	190	135	325	349	226	575	17	17	34	11	4	15	71	32	103

No.	Names of Registration Circles.	3. Poisoning. Suicidal. Male.	Female.	Total.	Accidental. Male.	Female.	Total.	*Otherwise. Male.	Female.	Total.	4. Hanging. Suicidal. Male.	Female.	Total.	Accidental. Male.	Female.	Total.	5. Wounding. Suicidal. Male.	Female.	Total.	Accidental. Male.	Female.	Total.	*Otherwise. Male.	Female.	Total.	6. Wild Beasts. Male.	Female.	Total.
1	Khándesh ...	...	...	...	1	1	2	...	...	...	5	2	7	1	...	1	2	...	2	28	7	35	15	5	20	8	11	19
2	Násik ...	...	...	...	1	...	1	1	...	1	1	3	4	...	...	...	...	...	...	9	3	12	...	5	5	1	2	3
3	Thána ...	1	1	2	...	...	...	1	...	1	11	9	20	1	...	1	1	...	1	46	7	53	4	4	8	5	4	9
4	Bombay ...	28	12	40	14	2	17	3	1	4	5	...	5	...	...	...	3	...	3	11	2	13	...	1	1	1	...	1
5	Kolába ...	...	...	...	1	...	1	...	...	...	1	...	1	1	...	1	2	...	2	14	5	19	3	...	3	...	...	...
6	Ahmednagar ...	...	1	1	1	2	3	...	...	...	1	1	2	...	...	...	...	...	...	...	1	1	...	...	...	1	...	1
7	Poona ...	7	7	14	6	7	13	3	...	3	1	...	1	1	...	1	1	...	1	16	4	20	7	1	8	3	1	4
8	Sholápur ...	2	2	4	1	...	1	2	...	2	3	...	3	2	...	2	...	...	...	1	1	2	1	1	2	...	...	...
9	Sátára ...	2	4	6	...	1	1	...	...	...	13	3	16	...	...	...	3	1	4	4	...	4	5	3	8	1	...	1
10	Ratnágiri ...	1	...	1	5	1	6	2	...	2	1	1	2	1	...	1	1	...	1	8	...	3	2	1	3	...	...	...
11	Belgaum ...	...	2	2	...	1	1	...	1	1	13	5	18	1	...	1	3	1	4	25	7	32	3	5	8	1	...	1
12	Dhárwár ...	1	1	2	...	...	...	...	...	...	11	7	18	2	...	2	...	...	...	21	3	24	4	1	5	3	...	3
13	Bijápur ...	...	2	2	2	2	4	...	...	...	13	9	22	...	...	...	2	...	2	8	2	10	2	1	3	...	1	1
14	Kánara ...	...	...	...	...	...	...	...	...	...	16	9	25	...	...	...	1	...	1	19	1	20	3	2	5	5	...	5
15	Surat ...	1	...	1	...	...	...	...	...	...	6	...	6	...	...	...	2	...	2	7	...	7	8	1	9	5	...	5
16	Broach ...	...	2	2	...	...	...	...	...	...	...	1	1	...	...	...	...	...	...	2	1	3	5	2	7	3	4	7
17	Kaira ...	3	2	5	1	1	2	...	...	...	8	10	18	...	1	1	...	...	...	2	1	3	5	1	6	...	...	...
18	Panch Mahále ...	...	...	...	...	...	...	...	...	...	1	3	4	...	...	...	...	...	...	1	...	1	2	1	3	...	1	1
19	Ahmedabad ...	...	4	4	...	...	...	2	...	2	7	7	14	...	...	...	1	...	1	2	2	4	7	1	8	...	1	1
20	Karáchi ...	1	1	2	3	...	3	...	1	1	5	1	6	2	...	2	1	...	1	7	1	8	12	2	14	7	4	11
21	Hyderabad ...	...	...	...	1	1	...	...	...	...	2	6	8	2	5	7	1	...	1	11	1	12	6	2	8	3	2	5
22	Thar and Párkar ...	...	...	...	...	...	...	...	...	...	...	1	1	1	1	1	1	...	1	...	...	...	...	...	...	3	...	3
23	Shikárpur ...	1	1	2	1	...	1	...	...	...	7	8	15	...	...	...	...	...	...	2	...	2	8	11	19	1	1	2
24	Upper Sind Frontier.	1	...	1	...	...	...	...	...	...	2	...	2	...	1	1	1	...	1	...	...	...	1	...	1	1	...	1
	Total ...	48	41	89	36	20	56	14	3	17	133	86	219	14	8	22	26	2	28	239	49	288	103	51	154	52	32	84

No.	Names of Registration Circles.	7. Snake-bite. Male.	Female.	Total.	8. Other Causes. Male.	Female.	Total.	9. Total. Male.	Female.	Total.
1	Khándesh ...	28	12	40	39	26	65	187	154	341
2	Násik ...	14	7	21	6	6	12	76	67	143
3	Thána ...	83	46	129	26	10	36	237	153	390
4	Bombay ...	3	...	3	129	54	183	244	105	349
5	Kolába ...	28	20	48	12	9	21	99	72	171
6	Ahmednagar ...	2	4	6	7	3	10	31	42	73
7	Poona ...	20	17	37	44	15	59	169	131	300
8	Sholápur ...	6	10	16	5	2	7	50	58	108
9	Sátára ...	32	27	59	26	17	43	161	166	327
10	Ratnágiri ...	28	20	48	18	14	32	106	84	190
11	Belgaum ...	18	12	30	20	8	28	135	135	270
12	Dhárwár ...	9	3	12	27	17	44	128	111	239
13	Bijápur ...	9	3	12	10	8	18	85	88	173
14	Kánara ...	13	9	22	13	5	18	128	92	220
15	Surat ...	30	9	39	48	24	72	149	103	252
16	Broach ...	14	17	31	23	12	35	62	59	121
17	Kaira ...	55	31	86	94	40	134	214	159	373
18	Panch Mahále ...	18	18	36	29	10	39	59	50	109
19	Ahmedabad ...	42	43	85	50	33	83	145	137	282
20	Karáchi ...	57	24	81	46	25	71	201	90	291
21	Hyderabad ...	116	34	150	42	19	61	247	104	351
22	Thar and Párkar ...	62	16	78	6	2	8	85	25	110
23	Shikárpur ...	64	19	83	78	28	106	231	110	341
24	Upper Sind Frontier.	8	4	12	5	2	7	26	8	34
	Total ...	759	405	1,164	803	389	1,192	3,255	2,303	5,558

*The term "Otherwise" is used, because when the Return is submitted, the Law may not have pronounced these cases to be "Homicidal."

OTHER CAUSES.

Deaths from other causes.

109. The recorded deaths from causes other than those specified number 68,883, 35,493 of which occurred among males and 33,390 among females. The total for 1886 was 56,388, so for this year there is an increase of 12,495. In the following table these deaths are shown for each district and Collectorate, and the mean for the last 10 years, the number and ratios per 1,000 of population, and the numbers and ratios for 1886 and 1887 are also given :—

Districts.	No.	Collectorate.	Population according to Census of 1881.	Deaths from other causes. Mean for 10 years from 1877 to 1886.	Ratio per 1,000 of Population.	1886.	Ratio per 1,000 of Population on Census of 1881.	1887.	Ratio per 1,000 of Population on Census of 1881.
Western Registration District.	1	Khándesh	1,237,231	892	0·77	830	0·67	1,605	1·30
	2	Násik	781,206	2,006	2·67	1,622	2·08	2,462	3·15
	3	Thána	807,367	1,712	2·08	1,242	1·54	1,449	1·80
	4	Bombay...	773,196	12,167	16·86	12,097	15·65	12,322	15·94
	5	Kolába	482,830	1,517	3·53	1,307	2·71	1,455	3·01
Central Registration District.	6	Ahmednagar	751,228	2,868	3·77	2,915	3·88	3,857	5·13
	7	Poona	900,621	2,916	3·23	3,347	3·72	4,797	5·32
	8	Sholápur	582,487	3,602	5·66	1,581	2·71	2,454	4·21
	9	Sátára	1,062,350	3,238	3·05	3,637	3·42	4,844	4·56
	10	Ratnágiri	997,090	4,975	4·95	4,473	4·48	5,110	5·12
Southern Registration District	11	Belgaum	864,014	8,033	8·99	4,880	5·65	5,176	5·99
	12	Dhárwár	882,907	6,272	6·78	4,441	5·03	4,330	4·89
	13	Bijápur	638,493	5,181	7·30	2,426	3·80	3,145	4·92
	14	Kánara	421,840	3,788	9·18	3,774	8·95	3,934	9·33
Eastern Gujarát Registration District.	15	Surat	614,198	1,607	2·63	1,519	2·47	1,983	3·23
	16	Broach	326,930	648	1·93	525	1·61	1,239	3·79
	17	Kaira	804,800	1,076	1·35	832	1·03	3,102	3·86
	18	Panch Mahále	255,479	335	1·34	92	0·36	167	0·65
	19	Ahmedabad	856,324	3,055	3·61	2,150	2·51	3,040	3·55
Sind Registration District.	20	Karáchi	478,688	1,202	2·63	1,456	3·04	1,370	2·86
	21	Hyderabad	754,624	628	0·85	703	0·93	503	0·67
	22	Thar and Párkar ...	203,344	157	0·81	138	0·67	143	0·70
	23	Shikárpur	852,986	332	0·41	331	0·39	341	0·40
	24	Upper Sind Frontier ...	124,181	55	0·50	70	0·56	55	0·44

ABSTRACT.

Western Registration District	4,081,830	18,294	4·71	17,098	4·19	19,293	4·72
Central do. do.	4,293,776	17,599	4·03	15,953	3·72	21,062	4·91
Southern do. do.	2,807,254	23,274	7·81	15,521	5·53	16,585	5·91
Eastern Gujarát do. do.	2,857,731	6,721	2·37	5,118	1·79	9,531	3·33
Sind do. do.	2,413,823	2,374	1·02	2,698	1·12	2,412	0·99
Total ...	16,454,414	68,262	4·17	56,388	3·43	68,883	4·19

Deaths since 1876.

110. The number of deaths registered from other causes in each year since 1876 is as follows :—

Years.	Number of Deaths from other causes.	Years.	Number of Deaths from other causes.
1876	63,882	1882	56,164
1877	1,38,426	1883	60,829
1878	75,642	1884	61,625
1879	59,467	1885	68,788
1880	49,736	1886	56,388
1881	55,522	1887	68,883

SECTION VII.

GENERAL HISTORY OF VACCINATION.

Preliminary.

111. In the Resolution on last year's annual report Government was pleased to remark: "The Sanitary Commissioner should be asked whether vaccination statistics cannot in future be prepared for one and the same period as vital statistics. The total number of persons vaccinated in 1886-87 was 903,910 as compared with 907,790 in 1885-86, but the decrease was entirely in re-vaccinations and was due no doubt to the comparative absence of small-pox. The number of infants under one year old vaccinated was only slightly less than in the previous year. The imperfection of Mr. Hewlett's method of comparing the number of such infants vaccinated with the number available was referred to by the Government of India in reviewing his report for last year, and is evident from the accepted inaccuracy of the birth statistics, the unsatisfactory nature of a comparison between birth statistics for the calendar and vaccination statistics for the financial year, and lastly the obvious mistake of supposing that all deaths of children under one year old must be deducted from births before the number of children *available* for vaccination is obtained." In reply I invited, in my letter No. 2713B, dated 7th October 1887, "the attention of Government to Government Resolutions, General Department No. 1552, dated 17th May 1877 and No. 2451, dated 19th August 1878, by which it will be seen that the Government of India has ordered the vital statistics to be kept for the calendar year, and the vaccination statistics for the official year, and that unless the Government of India alter its decision on these points, the present practice must continue."

As regards the remarks regarding what Government is pleased to term "the imperfection of Mr. Hewlett's method of comparing the number of such infants vaccinated with the number available," I have the honour most respectfully to observe that this method of calculation is not mine. It was introduced by my predecessor, Mr. Lumsdaine, as far back as in the report for 1878, and it has been continued ever since, and in my humble opinion, it affords as correct an approximate method of calculation as is possible to attain.

As regards the remark regarding the obvious mistake of supposing that all deaths of children under one year must be deducted from births before the number of children available for vaccination is obtained, I have the honour to point out that the Government of India in their letter No. 324, dated 29th September 1886, Home Department, Sanitary, follow the same course. They say "if the probable number of births is estimated at 40 per mille of population, the number of children born during the year would be 1,024,621. Deducting from this, the probable number of deaths at 175 per mille, the number of children available for vaccination was 845,313, &c. In my opinion, the limit of error in the Government of India's method of calculation is far greater than in the method adopted by Mr. Lumsdaine; for from the above extract it will be seen, that the Government of India bases its figures on probabilities—

1st, the probable number of births;

2nd, probable number of deaths under one year of age arrived at;

3rd, by the probable number of deaths at 175 per mille.

The death-rate of infants under one year of age is 175 per mille in England, but it is far higher in this country, *e.g.*, for the Presidency it was during 1886 201·58 per 1,000, and there is good ground for supposing, as I have shown, that the birth-rate is higher than 40 per 1,000. In the method that has been adopted by Mr. Lumsdaine, we deal, at all events, with actuals. I am, after a very careful and somewhat prolonged consideration of this subject, still of opinion

that the method of calculation hitherto in use in the Sanitary Commissioner's report affords the most accurate approximation for calculating the number of children available for vaccination which it is possible to attain, still, I shall, of course, adopt any mode of calculation that Government may be pleased to order and solicit definite orders on this point."

On receipt of the above letter, Government was pleased to pass the following Resolution No. 3487, dated 18th November 1887 :—" In the circumstances mentioned by Mr. Hewlett, there does not seem to be sufficient reason for changing the existing practice, either as regards the preparation of the vital statistics for the calendar year, and those of vaccination for the official year, or of the estimate of children available for vaccination.

Strength of the Department.

112. The strength of the department during 1887-88 was :—

5 Deputy Sanitary Commissioners.
3 Superintendents of Vaccination.
32 Inspectors of Sanitation and Vaccination, or one more than in 1886-87.
6 Assistant Superintendents of Vaccination, or one more than in the previous year.
29 Clerks and Kárkúns.
527 Vaccinators, or 16 more than in 1886-87.
534 Peons, or 10 more than in the preceding year.

During the year there has been an increase of 1 Inspector in the Sángli State, 1 Assistant Superintendent in the Pálanpur State, 1 Vaccinator for the Cantonment of Devláli in the Násik Collectorate, and 9 Local Fund Vaccinators—2 for the Collectorate of Sholápur, 2 for Ratnágiri and 5 candidate vaccinators in the Western Gujarát Circle (1 for Pálanpur and 4 for Káthiáwár States). In the Collectorates of Khándesh and Násik there are no paid candidate vaccinators.

There has also been an increase of 2 Municipal Vaccinators—1 for the town of Bijápur and the other for Aden. It is hoped that several municipal boards will find their way to make provision for the entertainment of special vaccinators in towns having a population of 10,000 as suggested in Government Resolutions Nos. 3033, 4010, and 1645, dated the 12th April and 22nd October 1885 and 7th May 1886 respectively.

The State of Dang in the Khandesh Collectorate has entertained 1 vaccinator during the year, 1 in the Pant Pratinidhi State in the Sátára Collectorate, and 2 in Pálanpur State. Additional vaccinators, as remarked in last year's report, are required for each of the States of Sunth, Kadána and Khairpur.

Work amongst the Civil and Military population.

113. The following table contrasts the work amongst the Civil and Military population during the year under report with that for 1886-87 :—

Establishment.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.
In Civil Life.												
Itinerant	834,986	867,736	32,750 (3·92)	...	44,972	47,205	2,233 (4·97)	..	879,958	914,941	34,983 (3·97)	..
Dispensary	17,699	8,501	..	9,198 (51·97)	943	734	..	209 (22·16)	18,642	9,235	..	9,407 (50·46)
Total ..	852,685	876,237	23,552 (2·76)	..	45,915	47,939	2,024 (4·41)	..	898,600	924,176	25,576 (2·84)	..
In Army Life.												
Native Army	2,970	3,117	147 (4·95)	..	1,618	1,352	..	266 (16·44)	4,588	4,469	..	119 (2·60)
British Army	317	401	84 (26·49)	..	405	499	94 (23·23)	..	722	900	178 (24·65)	..
Total ..	3,287	3,518	231 (7·03)	..	2,023	1,851	..	172 (8·50)	5,310	5,369	59 (1·11)	..
Total for the whole Presidency	855,972	879,755	23,783 (2·78)	..	47,938	49,790	1,852 (3·87)	..	903,910	929,545	25,635 (2·84)	..

879,755 persons were primarily vaccinated and 49,790 were re-vaccinated against 855,972 and 47,938 in 1886-87, showing a net increase of 23,783 or 2·78 per cent. under primary vaccinations and 1,852 or 3·87 under re-vaccinations. The rate of decrease in primary and re-vaccinations in dispensaries was 51·97 per cent. in the former, and 22·16 per cent. in the latter. The greatest decrease (50·46 per cent.) under total operations was also amongst dispensaries. This decrease was due to the transfer of the vaccination work from the medical officers in charge of dispensaries to the táluka vaccinators under the orders of the Government of Bombay in their Resolution No. 3851, dated 1st November 1886. On the whole there has been an increase of 25,635; or in other words for every 100 persons operated on in 1886-87 the numbers for this year have been 102·83.

Primary vaccinations.

114. The following table shows the number of persons primarily vaccinated, as also the increase or decrease for the last ten years :—

Primarily vaccinated.	Years ending 31st March.										
	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.
Persons ...	670,055	561,969	586,501	642,505	729,323	792,206	826,965	802,207	854,387	855,972	879,755
Increase ...	...	...	24,532	56,004	86,818	62,883	34,759	...	52,180	1,585	23,783
Decrease ...	62,129	108,086	...	...	...	...	...	24,758	...	...	...

Infants successfully vaccinated in the 24 Collectorates.

115. The following table shows for the last two years the number of infants successfully vaccinated in the Presidency, *exclusive of Native States.* The birth and death statistics are taken for the calendar year in calculating the number available for vaccination, because infants are generally not vaccinated until three months after birth :—

Years.	Children vaccinated successfully.		Children available for Vaccination.	Births returned as having been registered.	Deaths registered among Children under one year.
	Those under 1 year.	Those between 1 and 6 years.			
1886-87	361,720	149,190	489,302	581,553	92,251
1887-88	376,791	144,687	528,556	628,193	99,637

This year also the successful vaccination fell short of the registered births *minus* deaths amongst those under one year old. Out of 528,556 infants available for vaccination 376,791 or 71·29 per cent. have been protected. Last year the percentage was 73·93.

Results in Primary Vaccinations.

116. Out of 879,755 persons primarily vaccinated 839,263 were successful or 95·40 per cent., being only 0·09 less than in 1886-87. The number of unsuccessful cases was less than that in the preceding year, being 15,511 against 15,703. 1,487 persons were operated on a second time on account of the failure of the first operation, and in 26,468, or in 1,713 cases more than in the year 1886-87, the result was unknown.

Re-vaccinations.

117. During the year 49,790 persons were re-vaccinated against 47,938 for 1886-87. In 96 instances the re-vaccinations were repeated; in 7,436 instances the results could not be ascertained, and in 10,007 the operations failed. The number of successful cases was 32,443 or 65·16 per cent. against 64·55 in the preceding year.

Total Operations.

118. The total number of persons operated on was 929,545, and of these, 871,706 or 93·78 per cent. were successful. In 1886-87 the percentage was 93·85. 1,583 persons were operated on more than once; the "unsuccessful" numbered 25,518 and the "unknown" cases were 33,904. The details of the total number of persons operated on for the last two years by districts and circles of vaccination, together with the percentages of increase and decrease, are as follows :—

Districts and Circles.	Persons primarily vaccinated.				Persons re-vaccinated.				Total Number of Persons operated on.			
	1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.	1886-87.	1887-88.	Increase.	Decrease.
Western Registration District.	97,959	98,330	371 0·38	..	1,529	2,957	1,428 93·39	..	99,488	101,287	1,799 1·81	..
Presidency Circle	16,626	18,471	1,845 11·10	..	1,104	2,741	1,637 148·27	..	17,730	21,212	3,482 19·64	..
Central Registration District..	176,949	185,316	8,367 4·73	..	3,682	3,633	..	49 1·33	180,631	188,949	8,318 4·60	..
Southern Registration do. ..	129,925	139,933	10,008 7·73	..	6,606	9,643	3,037 45·97	..	136,531	149,576	13,045 9·55	..
Eastern Gujarát Registration District	141,486	139,227	..	2,159 1·52	1,636	2,137	501 30·62	..	143,122	141,464	..	1,658 1·16
Western Gujarát Circle ..	106,986	109,185	2,199 2·05	..	11,422	9,168	..	2,254 19·73	118,408	118,353	..	55 0·05
Sind Registration District ..	89,723	86,498	..	3,230 3·60	17,896	16,450	..	1,446 8·08	107,624	102,948	..	4,676 4·35
Baroda	70,011	73,289	3,278 4·68	..	1,438	894	..	544 38·04	71,449	74,183	2,734 3·82	..
Cutch	20,862	22,465	1,603 7·68	..	581	241	..	340 58·52	21,443	22,706	1,263 5·89	..
Aden, Muskat, Khilat, Quetta and Bushire	2,153	3,423	1,270 59·00	..	21	75	54 257·14	..	2,174	3,498	1,324 60·90	..
British Army	317	401	84 26·50	..	405	499	94 23·29	..	722	900	178 24·65	..
Native Army	2,970	3,117	147 4·94	..	1,618	1,352	..	266 1,644	4,588	4,469	..	119 2·59
Total ..	855,972	879,755	29,172 3·48	5,389 0·63	47,938	49,790	6,751 14·08	4,899 10·22	903,910	929,545	32,143 3·56	6,508 0·72

Primary Vaccinations by Districts.

119. In primary vaccinations an increase of 29,172 or 3·48 per cent. took place in all the districts and circles. These vaccination units stand in the following sequence; Aden, Muskat, Khilat, Quetta and Bushire; British Army; the Presidency Circle; Southern Registration District; Cutch; Native Army; Central Registration District; Baroda; Western Gujarát Circle and Western Registration District, and the rate of increase varies between 59·00 and 0·38 per cent. There was a slight decrease of 5,389 or 0·63 per cent. amongst the Eastern Gujarát and the Sind Registration District.

Re-vaccinations by Districts.

120. In re-vaccinations an increase of 6,751 or 14·08 per cent. is distributed over Aden, Muskat, Khilat, Quetta and Bushire; the Presidency Circle; Western Registration District; Southern Registration District; Eastern Gujarát Registration District and British Army, where the rate is 23·29 per cent. The decrease in other districts amounts to 4,899 or 10·22 per cent. These circles stand in the following sequence: Cutch; Baroda; Western Gujarát Circle; Native Army; Sind Registration District and Central Registration Districts; in the last-named the rate was 1·33 per cent.

Total Operations by Districts.

121. As regards operations an increase of 32,143 or 3·56 per cent. is observed in Aden, Muskat, Khilat, Quetta and Bushire; British Army; Presidency Circle; Southern Registration District; Cutch; Central Registration District; Baroda and Western Registration District, which has the lowest rate of 1·81 per cent., whilst a decrease of 6,508 or 0·72 per cent. is distributed over the Sind Registration District, Native Army, Eastern Gujarát Registration District and Western Gujarát Circle where it is only 0·05. The net increase is, as stated before, 25,635 or 2·84 per cent.

Percentages of success by Districts.

122. The following table shows by districts and circles the percentages of success in primary vaccinations and re-vaccinations contrasted with those for the previous year :—

No.	Districts and Circles.	Percentages of success of Primary Vaccinations.		Percentages of success in Re-vaccinations.	
		1886-87.	1887-88.	1886-87.	1887-88.
1	Western Registration District	97·51	96·04	65·01	57·08
2	Presidency Circle	97·34	96·02	62·96	61·73
3	Central Registration District	94·89	95·10	66·00	63·98
4	Southern do.	94·98	95·29	66·08	68·64
5	Eastern Gujarát do.	97·50	97·72	66·32	65·42
6	Western Gujarát Circle	91·23	91·32	63·90	62·77
7	Sind Registration District	95·56	95·02	62·84	64·73
8	Baroda...	96·32	96·52	81·43	80·42
9	Cutch	99·07	99·55	86·92	91·70
10	Aden, Muskat, Khilat, Quetta and Bushire...	93·92	96·06	95·24	84·00
11	British Army	88·33	89·52	45·13	62·53
12	Native do.	89·97	86·36	58·90	74·11
	Average for the whole Presidency ...	95·49	95·40	64·55	65·16

In the successful primary vaccinations the percentages are lower than last year in 6 out of 12 districts and circles. On the whole there has been a slight decrease in the percentage of successful cases over that of last year.

Ratio to the total Population protected.

123. The ratio to the total population of protection by successful primary operations is higher than last year in all the districts and circles except Eastern Gujarát, Western Gujarát and Sind Registration Districts. It is lowest in the Presidency Circle, being 22·97 per mille. In British and Native Territory it is respectively 31·87 and 32·97 against 31·65 and 32·39 per mille of population in the previous year. On the whole 32·37 persons of all ages per 1,000 of population against 31·91 last year, 31·94 in 1885-86, 29·84 in 1884-85, 30·89 in 1883-84 and 29·74 in 1882-83 were primarily vaccinated successfully.

Agencies.

124. In primary vaccinations the percentages are higher than in the preceding year in Government, Cantonment, Native States and British Army and lower in the remaining agencies. The highest percentage is 98·00 under Native States and the lowest is 86·36 in the Native Army. The next highest is 97·37 in Cantonments and the lowest is 89·52 in the British Army. In re-vaccinations the lowest percentage is 29·57 in Dispensaries and the highest is 96·78 under Government.

Sex.

125. There were 452,831 males and 426,924 females primarily vaccinated. The re-vaccinated were respectively 31,789 and 18,001, and the totals of persons operated on were 484,620 males and 444,925 females. In primary vaccinations the sex percentages were respectively 51·47 and 48·53 against 51·44 and 48·56 last year; in re-vaccinations they were 63·85 and 36·15 against 60·43 and 39·57; and in total operations they were 52·13 and 47·87 against 51·92 and 48·08.

Race.

126. Of the total number primarily vaccinated 4,440 were Christians, 673,761 Hindus, 131,252 Musalmáns, 2,171 Pársis and 68,131 persons of other castes; and in all classes except Musalmáns the numbers and percentages and in other castes the number only, are higher than last year, being 0·50, 76·59, 14·92, 0·25 and 7·74.

Age.

127. The age details are compiled for three periods, viz., under one year, between one and six and above six years. The numbers under each period primarily vaccinated were respectively 611,361, 254,690 and 13,704 against 585,745, 258,205 and 12,022 during the preceding year.

128. The quality of the lymph in use throughout the year was good. There was only one consignment of English lymph of 45 tubes for the Bombay district and one of 6 tubes for Aden during the year.

Lymph.

Animal vaccination was carried on in Bombay, Poona City and Cantonment, and Rájkot. The operation of inoculating heifers was generally successful. In Western Gujarát animal vaccination was, in the commencement of the cold weather, as usual, carried on in Rájkot by inoculating 8 out of 9 heifers successfully and the lymph was distributed among the vaccinators. Except in Bombay where animal lymph only is used, and in Poona and Rájkot where both animal and human lymphs were in use, vaccination in all other places was carried on from arm to arm and with human lymph. Vaccination with animal lymph was also carried on in Bándra.

Animal vaccination.

129. The total expenditure on account of vaccination is shown in the following table :—

Establishment.	Total Expenditure.						Compared with the preceding year.		
	1886-87.			1887-88.			+ Increase. —Decrease.		
	Rs.	a.	p.	Rs.	a.	p.	Rs.	a.	p.
Provincial	1,08,598	11	0	93,870	0	11	—14,728	10	1
Municipal	25,413	14	4	29,532	15	7	+4,119	1	3
Cantonment	662	5	6	722	10	3	+60	4	9
Local Fund	88,020	10	11	87,722	12	4	—297	14	7
Native State	57,480	13	9	60,228	2	1	+2,747	4	4
Total ...	2,80,176	7	6	2,72,076	9	2	—15,026	8	8
							+6,926	10	4
							—8,099	14	4

The total cost for the whole Presidency, including all charges, was Rs. 272,076-9-2, whilst the successful cases, excluding dispensaries and the army, were 859,255. The average cost for each successful case was annas 5-1 against annas 5-5 in the preceding year. Excluding the pay of the supervising officers the average cost of each successful case was annas 4-2 or 2 pies less than the previous year.

130. Taking together the work of all the Deputy Sanitary Commissioners, Superintendents of Vaccination, Assistant Superintendents of Vaccination and Inspectors of Sanitation and Vaccination, there were 4,531 encampments, 81,798¼ miles travelled in 8,423 days and 313,860 children inspected in 13,628 villages. Out of every 100 persons operated on 33·96 were this year inspected against 35·75 in the preceding year.

Work of the supervising officers.

131. Inoculation was not reported to have been practised anywhere in the districts and no instances were reported of any disease having been communicated through vaccination.

Inoculation.

132. In Bombay the Compulsory Vaccination Act has been in force for 10 years and in Karáchi for 8 years and in both places there has been, since the introduction of the Act, a considerable increase in the number of infants protected.

Compulsory Vaccination Act.

133. The Civil, Revenue and Political officers have rendered aid, when required, to all the officers of this Department.

Aid from Civil, Revenue, and Political officers.

SECTION VIII.

SANITARY WORKS—MILITARY.

134. The following table, compiled from the reports of the Executive Engineers in charge of military stations, shows the total amount spent on military works at each station in the Presidency during the year 1887 :—

Stations.	Actual Outlay.	Stations.	Actual Outlay.
	Rs.		Rs.
Bombay...	3,19,493	Asirghar	1,112
Colába		Málegaon	12,449
Thána	.....	Ahmednagar	243
Devláli	13,906	Sirúr	.....
Surat	.....	Purandhar	.....
Baroda	11,820	Poona	3,423
Ahmedabad	13,247	Kirkee...	319
Rájkot	.....	Khandála	.....
Bhuj	.....	Sátára	197
Deesa	859	Kolhápur	Not received.
Mount Abu	2,416	Belgaum	.....
Nasirabad and Taraghar ...	655	Dhárwár	Not received.
Neemuch	2,529	Karáchi	3,708
Mehidpur	.....	Hyderabad (Sind)	2,686
Agar	540	Jacobabad	.....
Indore	.....	Aden	10,212
Mhow	2,872		

135. The actual outlay on military works amounted to Rs. 4,02,686 during the year 1887. Of this sum Rs. 3,19,493 were spent in Bombay and Colába, of which Rs. 677 were for constructing temporary latrines and urinals for the General Post Office, Rs. 2,020 for drainage of the Elphinstone College, Rs. 1,385 for constructing a masonry drain in the compound of the European General Hospital, and Rs. 13,944 on drainage of the Officers' bungalows in the Marine Lines. At Devláli Rs. 13,906 were spent on military works. At Baroda Rs. 11,820 were expended on constructing new drains in the Sadar Bazár and improving the Cantonment drainage. At Ahmedabad Rs. 13,247 were expended, of which Rs. 129 were for piercing ventilating holes near the ceiling of certain rooms of the Station Hospital, Rs. 254 for constructing pavements to the 3 sinks of the wash-houses in the Royal Artillery Barracks, Rs. 376 for constructing latrines for 2 Warrant Officers of the Ordnance Depôt within the fort wall, Rs. 170 for providing jhamps to the verandah openings of the upper and lower stories of the quarters for 2 Conductors of Ordnance Depôt within the fort wall, Rs. 150 for constructing a latrine of 2 seats for lascars and native establishment of the Ordnance Depôt, and Rs. 404 for a latrine of 16 seats for the use of the Commissariat followers. At Deesa Rs. 257 were spent for asphalting the urinaries in the Royal Artilery Lines, Rs. 45 for constructing a wooden cover to the well, Royal Artilery Hospital, Rs. 169 for making a drain from the horse trough to the soldier garden, Rs. 26 for waste water cistern to wells Nos. 190-191 in European Infantry Lines, and Rs. 361 for asphalting certain urinaries to barracks, &c. At Mount Abu Rs. 2,416 were expended, of which Rs. 674 were for fixing jhamps to the married men's quarters, Rs. 1,694 for building nightprivies for the Lawrence School, and Rs. 48 for laying asphalt floor in servants' latrine attached to Station Hospital. At Nasirabad Rs. 188 were spent in improving ventilation by providing 7 new ventilators in European Infantry

coffee shops and Temperance hall, Rs. 104 for latrine with 4 seats built for the use of Station Church attendants, Rs. 136 for latrine with 9 seats built for the use of 2nd class hospital servants attached to Station Hospital, Rs. 6 for improving ventilation by making 4 square holes in latrine attached to European Infantry Barrack No. 12, Rs. 12 for constructing latrine of temporary nature built for the use of rest camp, and Rs. 43 for fixing rain water pipe to carry rain water away from plinths of Station Hospitals. At Taragarh Rs. 60 were spent in improving ventilation by opening new door and window in reading-room, Rs. 126 for improving ventilation by providing wire netting doors in each of the married quarters in family block No. 15.

136. At Neemuch Rs. 2,200 were expended for whitewashing of all cook-houses attached to Royal Artillery, British Infantry and Station Hospital, and Rs. 329 for scraping and cleaning the walls of British Infantry Barracks and certain rooms in Royal Artillery Barracks; earth floors of urinaries have been dug up, old stuff removed and fresh earth put down. At Agar Rs. 540 were expended: of this sum Rs. 281 were spent on annual repairs, Rs. 155 for cleaning and deepening two wells in the Cavalry Lines, and Rs. 104 for cleaning and deepening a well in the jail. At Mhow Rs. 58 were expended for improving the drainage for carrying off urine and rain water at elephant sheds and reconstructing urine cesspool, elephant lines, Rs. 694 for repairing the surface drains running alongside the bullock sheds, Rs. 802 for constructing a brick wall of moderate height on the east side of the Battery Lines and Rs 789 for petty works. Out of Rs. 1,112 spent on sanitary works at Asirgarh, Rs. 37 were expended on conversion of State prisoners' old latrine into a lavatory and latrine for the use of the European guard. Also Rs. 75 were expended on improving the ventilation of the Masjid Barrack by adding six more ventilators. Repairs to the extent of Rs. 12,449 were made to the Native Infantry Lines at Málegaon. At Ahmednagar Rs. 129 were expended for providing and erecting water tanks to the several cook-houses in the European Infantry Lines, and Rs. 114 for providing a water reservoir for foul water and 6 cloth pegs in the Station Hospital. At Poona Rs. 3,423 were expended: of this sum Rs. 2,769 were for carrying out a portion of the drainage scheme in the Native Cavalry Lines at Ghorpuri, Rs. 325 were for constructing a cut-stone drain from the end of the present pucca drain behind the Ghorpuri pat-cheries, and Rs. 329 were for constructing a cut-stone drain from the end of the present pucca drain behind the east blocks of married quarters at Ghorpuri. At Kirkee Rs. 319 were expended on 2 temporary urinals and a small drain from the cesspool in rear of the Gloster Barrack. At Sátára Rs. 60 were expended for paving the floor of the guard-room and Rs. 137 for constructing latrines for the native followers of the Detachment European Troops. At Karáchi Rs. 3,708 were expended: of this sum Rs. 1,850 were spent for providing extra latrine accommodation to the Station Hospital, Rs. 26 for filling up the well near the plunge bath in Napier Lines, and Rs. 13 for filling up the well of plunge bath in Somerset Lines and removing the Persian wheel to the well in garden kept up by the Royal Artillery. At Hyderabad Rs. 2,686 were expended, of which Rs. 737 were spent for constructing a meat-hanging shed near the present slaughter-house for the troops, Rs. 1,450 for converting Barrack Serjeants' quarters into a small bakery and adding a shed with three ovens, Rs. 66 for removing and rebuilding urinaries of barracks Nos. 6 and 7 in European Infantry Barracks, and Rs. 67 for filling in the old disused well near the plunge bath in the European barracks. In the Aden District Rs. 10,212 were spent on several works of improvements, additions and alterations during the year.

SECTION IX.

SANITARY WORKS—CIVIL.

137. The original reports, received from the several Municipalities, have been abstracted, and the results are here given.

138. The total annual income of the Municipalities during the year 1886-87 was Rs. 34,79,558 and the sum expended on conservancy by them was Rs. 7,36,449.

139. The population, annual income, and expenditure on conservancy in each Revenue Division will be found in the following table:—

Division.	Population.	Income.	Expenditure on Conservancy.	Division.	Population.	Income.	Expenditure on Conservancy.
		Rs.	Rs.			Rs.	Rs.
Northern Division ...	574,465	9,89,689	2,63,065	Southern Division ...	344,372	4,23,511	1,09,191
Central Division ...	652,997	11,91,030	2,18,300	Sind Division ...	319,571	8,75,328	1,45,893
				Grand Total ...	1,891,405	34,79,558	7,36,449

Water-supply generally.

140. Water-supply, which is ample and of fairly good quality, is derived from rivers, tanks, and wells. Some of the municipal towns are mainly dependent on rivers for their drinking water-supply; and during the hot season when the water becomes scanty, peons are temporarily employed to see that the water is not fouled: and when the rivers cease to flow, temporary wells are sunk in their beds. In Sind canal water is used for drinking purposes in several towns.

Ahmedabad Collectorate, Ahmedabad.

141. *Northern Division.*—The drawbacks in the existing system of water-supply in the town of Ahmedabad are that the water is bad in quality and insufficient in quantity. The Municipality have resolved to adopt the scheme recommended (No. 2) by Colonel Ducat with such modifications as to execute the work at a cost of Rs. 6,00,000. An experimental well, as recommended by Colonel Ducat, was sunk before the monsoon at Dudhesvar and the water after being tested by Dr. Lyon, the Chemical Analyser to Government, was pronounced to be unexceptionably free from contamination and good for drinking purposes. The Municipality has made an application to Government to authorize it to raise the required money by loan in the open market. At Dholka town the water-supply for drinking purposes is from two tanks and 23 wells, and Rs. 457 were spent in cleaning, deepening, and repairing the tanks and cleaning out wells, and making railings to them. There are 97 wells, 5 step-wells and 3 tanks at Paráníj. The water drawn from the Háthmati Canal to Bankoria tank is used for all purposes except drinking. The Municipality of Paráníj paid Rs. 50 to Government for this water, and this arrangement will probably be made in future years. At Modása the supply of drinking water is from 20 wells out of 68. Out of 20 wells 8 are municipal property. Rs. 790 were spent on repairs to wells since the establishment of this Municipality. The Municipality of Gogha regrets not being able to construct a dipping well proposed to be made near the Rámkund owing to want of funds. The newly established Sánand Municipality is in the infant stage, and has three large tanks in its municipal limit; their water is used for bathing, washing and domestic purposes, and for watering cattle. There are also 8 wells within and 5 outside the municipal limit. The water of the wells within the municipal limit and of one called Raghebai's well outside the municipal limit is used for

Dholka.

Paráníj.

Modása.

Goghá.

Sánand.

drinking purposes. Rs. 7 were spent in filling up the broken parts of the bank of the Bhudretti Tank.

Kaira Collectorate, Kaira.

The town of Kaira is situated on the river Watrak, which is the principal source of water-supply for the most part of the town. There are besides 8 wells in and about the town which are also used for drinking purposes. The same river also provides water to the people of Mehmudabad town. There is also a tank generally called the Fata Taláv, which is situated about 600 feet distant to the south of the town. Its water only lasts for six months. There are also 13 wells of sweet water, of which 10 are public property. All these wells are pucca built of bricks and chunam masonry and are cleared out generally every third year. It is to be regretted that the low caste people have no well for their separate use, and have to depend on the river for their daily supply. Besides the wells above enumerated, there are some sweet water ones in the fields, and 36 other wells belong to private individuals, of which 6 contain sweet water. The river Shedi is three miles distant from Nadiád to the north, and flows by the village of Manjipura and other petty villages. There are 10 tanks situated at the different Bhagols of the town. Most of the talávs are dry by February or March, but two, namely, Oodevar and Kambhnáth, hold water all the year round. They are in good repair and are cleaned periodically. To increase the water-supply of the town the Municipality have contemplated to combine the Kund and Sher tanks into one by removing the embankment which divides them, and for this purpose Rs. 500 have been allotted in next year's budget. There are 23 wells situated outside the town near the different gates, and 5 wells inside. All are sweet water wells. Seven of these wells are reserved for the use of the low caste people—Bhangis, Dheds, and Chámbhárs. There are also 3 step-wells in the town, one each at the Ahmedabadi, Dumral, and Chaklosi Bhagols. There are 142 wells of brackish water inside the town. The Municipality have expended Rs. 276 in railings and repairs to wells, and providing drainage for the wastage water of Udegaria. Three wells of brackish water, one at Gajipurváda, one at Mogul's Koti, and a third near the old Kacheri have been provided by the Municipality for public use. There are 18 reservoirs in the town of Kapadvanj, and the stagnant water in some of these is removed once a year, and in some fortnightly, and new water from adjacent wells is taken in. There are two rivers to the north side of the town. The Mohar is 250 feet distant, and its water is generally used for all purposes by lower classes. The approaches to the river are all natural. The river Waranashi is ¾th of a mile distant from the town, and its water is very clear, and the people are anxious to use it for drinking purposes. To the east of the town and close to the municipal limit there is a tank called Rattee Taláv, which is not pucca built. Another called Wasta Talao at ¼th a mile distant from Sarkhalia Gate. There are 11 wells and one vao in the municipal limit, and the water in them is clear. There is also a vao of sweetwater (step-well) in the town. All these are public property. There are other 130 private wells of brackish water and 14 are public. The chief source of water-supply to the people residing in the town of Dákor and to pilgrims is an extensive tank, called Gomati Taláv. Water remains in the tank for the whole year throughout. For drinking purposes well water is chiefly used, but at the time of big Punems the tank water is also used by the pilgrims for drinking purposes. The total number of wells in the town is 130, excluding a step-well situated on the way to the Dákor Station. Of all these wells 2 only are public. Dheds have 2 seperate wells; Bhangis had no well up to this time, but Rs. 400 have been sanctioned by the Municipality for the construction of a well for them this year, and it is under construction.

Mehmudabad.

Nadiád.

Kapadvanj.

Dákor.

Panch Maháls, Godhra.

Dohad.

At Godhra the water-supply consists of one tank and 69 wells within municipal limit, and the river Mesri which passes through the southern portion of the town. There is a large tank called Chhabu on the west side of Dohad town, which supplies water throughout the year. It is cleansed out every year by the Municipality. The expenditure incurred on this account during the year was Rs. 200. Owing to less fall of rain

in the year preceding that under report it was partially dried up and a sum of Rs. 504 had to be spent in deepening it. The scanty fall of rain last year left it empty, and it is now quite dried up. The Municipality has again sanctioned Rs. 1,000 for deepening the tank in the current year. There is also the river Dadhimati, which flows along the south and west of the town, and forms a source of supply. The stream flows for 8 months only, but this year it has dried up very early. There are 48 wells in the town, of these 5 have steps. Four of them are public. All except 4 are within the municipal limit. Water of only 9 wells is used for drinking purposes, and that of the one built by the Municipality is considered the best. The municipal, Fakirvála, Tokarkooi and Nandivála wells were cleaned this year at a total cost of Rs. 98.

Broach Collectorate, Broach.

The water-supply of Broach town is very defective. There are three sources upon which the inhabitants depend, *viz.*, (1) from rain water, (2) from the river Narbada, and (3) from wells. The well-to-do people have underground reservoirs, called "takas" in their houses, in which rain water is collected from the roof of houses, and stored. There are in all 1,266 rain water takas. The poorer classes obtain their drinking water from the river Narbada for nearly 9 months of the year. The river gets brackish from the beginning of April, when the river water drinking community has to resort to wells. Although the Municipality is well aware of the defective state of the water-supply, it can do nothing in the matter for want of funds. There are 29 draw wells. They are mostly situated on the outskirts of the city at the east, north and west ends; groups of wells are situated in the city in two places, *viz.*, in the Ratan Taláv and Fata Taláv localities. The water is sweet and good, but the supply in some of them is scanty. They were cleaned out during the year. Most of them are well built and have parapets and platforms, and the mud and filth round about them, caused by the careless way of drawing water, are always removed. The railings round some wells were repaired during the year. There are two tanks, one of which has steps. They are for the most part surrounded by a parapet wall. The tank which has steps retains a good quantity of water all throughout the year, is mostly used for domestic purposes.

Anklesvar.

At Anklesvar there are 10 private wells now used for drinking purposes, some of them are well and the others fairly well built. The supply never fails. There are 49 other private wells, and 4 tanks without steps, used for all purposes. There are three cattle troughs which are kept filled when the tanks dry up.

Jambusar.

There are 15 private wells, 2 having steps, and 1 municipal well in the town of Jambusar, and 2 tanks which usually contain water throughout the year.

Surat Collectorate, Surat.

The inhabitants of Surat obtain their drinking water-supply from three sources, *viz.*, from masonry tanks constructed under the ground wherein rain-water is stored during the monsoon from roofs or terraces of houses, (2) from wells situated on the outskirts of the city, and (3) from the river Tápti when there is no tide.

Ránder.

In the town of Ránder people use the water of the river Tápti, and of fresh water-wells, 8 in number, for drinking purposes.

Bulsár.

The principal source of water-supply for the inhabitants of the town of Bulsár is from a large tank called Maloo Taláv and about 17 fresh water wells. There are 8 other tanks and 66 wells besides the above. The water of these wells is brackish, being impregnated with mineral matters, and used for miscellaneous purposes.

Mándvi.

The river Tápti flows on the south side of Mándvi town, and its water not being subject to the influence of the tide remains always sweet, and is used by most of the inhabitants of the town for drinking and other purposes. There are 127 private wells, and 9 belonging to the Municipality. There is also a step-well belonging to the Municipality. There are two troughs that are kept full of water during the hot season for watering roads and also for the use of cattle. The Municipality has also built four reservoirs which are kept full of water brought from the above said step-well for use in case of fire. Nine municipal and 6 private wells situated on public roads used by the public were cleaned during the year at a cost of Rs. 9. One well in Kachhiafalia was repaired at a cost of Rs. 38.

Thána Collectorate, Thána.

The supply of water for the town of Thána is received from the Pokrun tank. During the year there were in all 21 public hydrants and 11 water-pipes laid on to private houses. There are 13 tanks within the municipal limit. Of these 4 only retain water throughout the year. The water of all these, except two, is hardly used for drinking purposes. Though it is the desire of the Municipality to clean some of these tanks and render them more useful to the people, yet want of funds obliged them to defer their object being put in execution during the year. One of these tanks, namely, the Masonda, which is the largest of all, has been a standing nuisance to the town. Most of the causes of the insalubrious state of the climate of Thána are to be found in the existence of this tank in its present condition. It is almost filled up with rank vegetation and mud and accumulation perhaps of more than half a century. Mosquitoes, which are the inveterate foes of human repose and rest have, as it were, found a regular home in this tank. Unless the tank is cleared of the mud and vegetation the sanitary condition of the town will never be placed on a proper footing. Any single-handed effort on the part of the Municipality to clean this tank is simply impracticable unless Government helps to rid the town of this nuisance. There are 23 public wells, 14 of these do not fail in their supply. Since the introduction of the Pokrun water into the town most of the public as well as private wells have been found to retain more water than they did previously. Besides these there are 11 wells in the military lines and the esplanade together which are in charge of the Public Works Department. Some 2 or 3 of them are exclusively used by the lower classes. There are also 249 private wells in the town.

Kurla.

At Kurla the water-supply is generally insufficient and of bad quality and derived partly from Vehár, but chiefly from wells and a tank. There are 46 wells within the municipal district, but they generally run dry two or three months before the monsoon and contain brackish water. There is one large tank in the Kurla paith bazaar; its water is used for all purposes. There are two dipping wells occasionally supplied with Vehár water. A few of the houses and the mills are supplied with Vehár water.

Bándra.

The water sources at Bándra are the Vehár water, tanks and wells. The Bándra large tank supplies good drinking water throughout the year. Three tanks supply water for drinking purposes, and there are 7 other tanks. All these tanks, except the large one, are shallow, and become dry before the month of March. The large tank was cleaned during the year. There is one public well at the foot of the hill on the east side, and supplies drinking water up to the end of March. It has a parapet wall and a masonry platform all round. There are 170 private wells.

Bassein.

There is the Papadi tank within the limit of the Bassein Municipality at a distance of about one mile from the town, which supplies drinking water for the Papadi village as also to Chowbára Páda, where there are about 30 houses of Bhandáris. It is situated near the Kiroli village. On three sides of the tank there are steps. The expenditure incurred for cleaning the tank during the year 1886-87 was Rs. 50. There is another tank called Tomtalai at a distance of about ¼th of a mile. It is reserved for bathing and clothes-washing by Dhobies and for cattle. In the centre of the town there is a well built tank, used only for bathing and washing clothes. There are 11 public wells in charge of the Municipality, and there is a number of wells in the compounds of the several inhabitants.

Máhím.

At Máhím there is a small stream called the Paneri to the east of the town across which an earthen dam is thrown at the end of the rains. By this means a supply of fresh water is obtained for cattle and for washing clothes. About half a mile to the east is a large tank known as the Ránjani tank, which has been thoroughly repaired and now holds a good supply of water. It is only used for drinking purposes, and the well-to-do inhabitants have water brought from it to their houses. A man is engaged to watch the tank at Rs. 3 a month and a hedge has been put round it, and it is cleaned at municipal expense. There is a stone-built tank with steps in the bazar and its water is only used in the rainy season for washing clothes. There are some public wells which are cleaned by the Municipality, and 283 private wells in compounds and gardens, but the water in them is not good. There are also some small tanks which are dried up in February or March. The Warala tank to the north-east and at a distance of about

Bhiwndi.

1½ miles from Bhiwndi, supplies water to the inhabitants of the town through a main iron pipe and is distributed by reservoirs, stand-pipes and connections, and is only used for drinking and domestic purposes. Besides this tank there is Dharan, about ¾ths of a mile from the town, where water flowing from the river Ram-nudi near Shelar is stored by means of a masonry dam. This water is at present chiefly used by washermen for washing clothes and watering cattle. There is another tank with steps, and 4 without steps. There are 5 public wells. Two of them are used by low caste, *viz.*, Mahárs and Chámbhárs. The rest three are used by Hindus and Mahomedans. The supply never fails and the water is pure and wholesome. There are 175 private wells, which, with the exception of 11, have steps. There are 5 tanks within the limit of the Kalyán Municipality, *viz*:—(1) Shenala, (2) Rabatai, (3) Rajala, (4) Davinje, and (5) Lendi. The first 4 are old tanks and the last was partly excavated and repaired by the Municipality about four years ago. The water from Shenala and Rabatai is used for drinking purposes, and that from the other three is only used for washing and watering cattle. Of the 5 tanks Shenala is the largest one, its area being about 25 acres. Its water becomes undrinkable during the latter part of summer owing to the accumulation of silt in it. It would be highly advantageous to the people of this town if this tank were thoroughly cleaned and repaired, but the present condition of the municipal funds is not such as to admit of such a large work being executed. There are 3 wells called Gungas in the town to which water from this tank is conveyed by means of earthen pipes. The Municipality last year repaired and cleaned out the masonry aqueduct and the openings adjoining the tank, and this year the steps on the west bank thereof were repaired. Rs. 200 were sanctioned by the Municipality for the removal of the weeds, &c., from the tank, but owing to rain this work could not be completed. About 50 years ago the water from this tank was famous for its digestive properties, but no repairs having been done to it for more than 130 years it has become full of mud. The Rahatai tank is a small one and being far from the town, only those who can pay for bringing it use the water of this tank. Besides these tanks there are 369 wells within the limit of this Municipality. Of these 8 are public wells. A design for laying Tánsa water-pipes to the town is at present under consideration, and it is hoped that one of the most essential wants of the people of this town will, thereby, be fulfilled.

Kalyán.

142. *Central Division.*—At Nagar Rs. 1,530 have been laid out on the repairs of the four aqueducts. Rs. 21 on the Warulvádi feeder of the Kapurvádi aqueduct and Rs. 6 on zirás in the Seena river. The Municipality have during the year discovered a sixth aqueduct in the Khokar Nála on the borders of the village of Nimbgaon in the Táluka of Nagar, at a distance of nearly 5 miles from the city. This aqueduct has been traced as far as the village of Nepti at a cost of Rs. 163. Its further traces are not noticeable. The Municipality have intended to connect this aqueduct with the source of the Nepti aqueduct, and thus to make the Nimbgaon aqueduct a feeder of the other. The feeder line is nearly 4,400 feet long. The connection will be completed probably during the current year. When the whole is made one complete aqueduct it will be found to command an average strength of 6 moat power. The connection will cost the Municipality Rs. 12,000. Rs. 4,131 were expended on the maintenance of the four aqueducts in payment of moat charges during the month of April, May and June. The scanty rainfall necessitated this outlay. The establishment on the superivision of the water-works and cisterns cost Rs. 158, and the total cost on water-works during the year amounted to Rs. 5,846. The Bhingar water-supply is an excellent and perennial one. There are 9 tanks which are cleaned regularly once a year. There are 5 public wells, of which 1 only has a parapet wall and a pavement all around, and 1 with steps and moat. There are 60 private small wells in the houses of the inhabitants. The drinking water-supply for the inhabitants of the Sangamner town is from the

Ahmednagar Collectorate, Nagar.

Bhingar.

Sangamner.

river Pravára. From 8th December a portion of the river was reserved for drinking purposes. The reserved portion was cleaned of the moss and other dirty accumulations in the water, and stones were provided where washing was permitted. There was a total expenditure on this head during the year of Rs. 38. There are about 613 small and large wells in the town. At Vambori there is a stream water-supply, but being insufficient for the purposes of the inhabitants, 10 wells are sunk in the bed of the stream. There is also a step well beyond the stream, and its water is used by the inhabitants in fair seasons. Three wells in the stream are annually required to be cleared of sand. They are out of repair and a sum has been asked from the Local Board as there are no funds with the Municipality sufficient to meet the expenses of reconstructing them.

Vambori.

The town of Songir gets its supply of drinking water from a large and well built well known as *goda vihir* situated to the north of the town. The well is built near a dyke which is embanked by the Municipality for the storage of water. The *goda vihir* receives its supply by percolation from this storage. The Municipality has put up 29 Ráháts (water wheels) for drawing water, and one man is specially engaged to keep the pavement and the surrounding place clean. Besides this well there are 5 public and 12 private draw wells. For watering cattle the Municipality has provided a masonry trough near the goda vihir. The river Bori running to the east of Amalner town affords a pure and abundant supply of water to the residents, and the Municipality incurs a small expenditure annualy to see that the portion of the river from where the people get their supply of water is kept clean. There are 4 public and 303 private draw wells in the town. The water of these wells is good. The town of Parola is badly off for water. There are 52 public and 30 private wells in the town, but all these are dependent on the storage of water in the ditch around the Parola fort. Although there are 65 public and 20 private wells, very few yield fresh water. The inhabitants of Erandol town are dependent for their drinking water-supply on the river Anjani and the Bendi Nála. The river flows along the southern and eastern sides of the town. The Bendi Nála flows on the southern side of the suburb called Pura, which falls into the river Anjani. There are 5 pucca bundhárás existing, two on the nála and three on the river Anjani. In order to accumulate a sufficient quantity of water in the bed of the river the two bundhárás existing on the eastern side of the town are generally closed by wooden planks maintained by the Municipality. When the river dries "Zirás" or artificial springs are made in the bed of the river in the hot weather for drinking purposes. At Dharangaon the water-supply is derived both from public and private wells existing in the town. There are two well-built tanks, one at the eastern and the other at the western extremity of the town. They are respectively named the Teli tank and the Bibi tank. There is also a stream running through the town which separates it from Pura, which is a suburb of the town on the north. The water of the nála is pure and fit for drinking purposes whilst it flows. In order to accumulate water during the hot weather, in the bed of this nála, a bundhára has been constructed across it by the Municipality. There are 62 public and 32 private wells; of these 11 wells have steps. All the wells are in good repair except 7. There are 47 private wells of fresh water within the Bhadgaon municipal limit, and 4 public wells with steps. All the wells are in good condition except these 4, the parapets of which are not in good repair. The water-supply of the town is mostly derived from the river Girna and from private and public wells. The water-suppy at Maheji during the fair which exists for a period of about 3 or 4 months, is derived from the river Girna. There are only 2 public wells without steps within the municipal limit. The river Aronavati flows through the south of Shirpur town, and gives an abundant supply of water to its inhabitants all the year round. There are also 128 private and 42 public wells. Of these 42, 6 are built especially for Mahárs and other low caste

Khándesh Collectorate, Songir.

Amalner.

Parola.

Erandol.

Dharangaon.

Bhadgaon.

Maheji.

Shirpur.

people. Besides these there are 2 wells with steps and 2 without, and 3 wells with cattle troughs for watering cattle. At Chopda there are 6 wells with steps and about 50 without steps, 3 of which are used for cattle and are repaired out of local funds. There are 5 wells with steps and 102 without in the town of Sindkheda. There is also a river, by name Burai, which flows from south to north, and has, in its bed, three pucca built Shewdis. When this river runs dry the Shewdis are dug out. Besides these, rough bottomless wooden cisterns are buried in the sand in which water collects. There are also two cattle troughs, one of which has been built out of local funds. For this cattle trough the Municipality has engaged a water drawer and a pair of oxen, the total expense for the year being Rs. 164 against Rs. 192 last year. At Betávad there are 3 step-wells in the bed of the Panjra river. Besides these, there are 117 wells without steps, of which 4 were built during the year under report. The river Panjra flows by the town. There is also an irrigation canal to the west of the town. The principal source of water-supply to the inhabitants of Taloda town is derived from wells belonging to private individuals and the jághírdár, some of which run dry in the hot weather. There is a large well built out of contributions by local and municipal funds. It is in contemplation to improve the water-supply by repairing an old tank. The water-supply of the Sháháda town is derived from the river Gomai, and in addition there are a few small wells in the town. The town of Prakásha, being situated on the junction of the two large rivers, the Tápti and Gornai, has an abundant supply of water. Besides this, there are 51 wells in the town, 2 belong to the Municipality and 49 to private individuals. In Nandurbár town the water-supply is very bad. There are 67 public and 43 private wells. There is also a good cattle tank, generally containing water throughout the year. There is a nála near the town but it is generally dry throughout the fair season, when springs are dug up in its bed. The Municipality have commenced to dig a well in the bed of the nála, which is not yet complete. In Jalgaon town there are 215 wells, of which two are step-wells. Of these 4 belong to Government and 1 to the Municipality. There is a nála to the east of the town and a tank near Meheran village from which it has derived its name Meheran tank. From this tank water is supplied to the whole of Jalgaon town by means of iron pipes. No new iron pipe has been laid in the current year. An iron pipe leading to the travellers' bunglow, which was one inch in diameter, was removed and a two-inch pipe substituted. At Bhusawal there are 181 wells, of which 2 only belong to the public. The river Tápti runs to the north of the town. At Varangaon there are 333 wells in the town, of which one belongs to the municipality. The river Bhogawati is very near the town. In Sávda town there are 465 wells of sweet water and 188 of brackish water. Of these 1 has steps, 6 belong to Government and 30 wells are public. There is one Hel. It is in the middle of the town. One well which is on the west of the chávdi has been fitted up to allow of working a moat, if required. There is a dry river bed to the north of the town named Pátál Ganga. The Municipality proposed to dig for water, but were prevented from doing so owing to the expense of their school and proposed dispensary. The water-supply at Yával is good. There are 570 private wells, of which 1 is a step-well. There are two small rivers to the west of the town. The water-supply of a considerable part of the town of Dhulia is mainly dependent on the river Pánjra. There are 27 public draw wells; one of them is for lower castes. Some of the lower caste people have their own wells, and most of those who have no wells of their own live near the river. The supply never fails and the quality is good. There are also 273 private wells containing fresh water and 177 containing brackish water. The subject of providing this town with a good supply of water has been under consideration for a long time. Many schemes were proposed, but after mature consideration, what is called the Dedargaon water works scheme has been approved.

Chopda.

Sindkheda.

Betávad.

Taloda.

Sháháda.

Prakásha.

Nandurbár.

Jalgaon.

Bhusával.

Varangaon.

Sávda.

Yával.

Dhulia.

Násik Collectorate, Málegaon.

The river Masuni supplies water to the inhabitants of Málegaon town, and after it falls short, the Municipality is obliged to construct a dam of sand and earth across the river near the Máhádev's temple on the west. Running springs are dug below the dam which yield clean and pure water for drinking purposes only, whereas for washing and other purposes the water let off from the current of the river is used. A strict supervision by employing special peons, &c., is observed that it may not be fouled. The collected and reserved water above the dam was taken care of by constant cleansing and purifying by means of charcoal, alum and chunam as directed in the sanitary primer book. The Municipality employed a special establishment at a cost of Rs. 219 for about 4 months of the year against 138 of the previous year. Out of the 11 public wells of brackish water, 2 are large and have steps. Besides these wells there are 90 private wells in houses and compounds of private persons. In the town of Yeola the water-supply is scanty. It always fails in the hot season, when it is received from the wells near the storage tank of the Municipality by means of moats. The expenditure on this work and other repairs to the wells of good drinking water near the town amounted to Rs. 1,090 during the year. The municipality will soon undertake the construction of the Khirdisatha water-works to increase the supply. The inhabitants of Násik derive their supply of fresh water chiefly from the Godávari river which flows between Násik and Panchvati. After the monsoon the river water gradually decreases in quantity, and during the hot weather a cutcha dam is thrown across the river near Dangar Ootára leaving an outlet for feeding the reservoirs in the river used for drinking, bathing and washing. A temporary bridge is also constructed at Dangar Ootára for the passage of carts, passengers and cattle in order that they may not pollute the water by passing through it. Peons are temporarily employed to patrol the river banks in order to prevent people from washing their dirty clothes and utensils in it and also throwing in filth. The supply of water from the Godávari for drinking and domestic purposes is insufficient for the requirements of the public, and plans and estimates are made for a water scheme to supply the town with good drinking water. There are a number of masonry tanks in the bed of the river built by private individuals. The tanks above Rám-kund are reserved for drinking and those below it are set apart for bathing and washing. There are a number of wells in the houses of the inhabitants. The inhabitants of Kájipura and the southern portion of the town derive their water-supply from Dhondu Máhádev's fountain and public wells, of which there are a number. There are two rivers quite close, one to the west and the other to the south of Sinnar town. In the hot season when water fails in these rivers, zirás (springs) are dug in their beds. Several houses in the town have wells of pure water. There are five big wells with steps whose water is polluted and give rise to guineaworm. During the hot season, a peon is engaged to prevent the water of the rivers from being fouled. The cost incurred on this account amounted to Rs. 10. At Igatpuri there is a tank to the south-east of the town built by the G. I. P. Railway Company which supplies the town with water gratis. There are 7 stand-pipes consisting of 28 cocks. In addition there are 18 wells regularly built and a few water holes. Of these 9 wells have perennial springs. One of the wells has a pipe let into it. At Trimbak there are 21 wells—20 with steps—of which 5 are used for drinking. Besides these there are 10 tanks out of which only one, Visoba's tank, is used for drinking purposes.

Yeola.

Násik.

Sinnar.

Igatpuri.

Trimbak.

Poona Collectorate, Poona.

There are five sources of water-supply to the city of Poona: (1) Katruj Aqueduct supplies 650,000 gallons per day, (2) Chaudhari's 50,000, (3) Nana Fadnis' 100,000, (4) Rástia's 50,000 and Mutha Canal about 650,000, or a total of 1,500,000 gallons a day, or about 15 gallons per head per day. 125 dipping wells and 130 stand-pipes supply drinking water to the people. There are 1,285 private wells. The river Mutha, the Nágzari nála, the Máuik nála, the Ambil nála and the distributing channels of the canal are also used for ablution, washing, and for cattle. 1,559 houses

were supplied with water by means of pipes at the close of the year, out of which 1,439 paid rates, 41 were free and 79 had stopped the supply. At Sásvad town the river Karah supplies water to the inhabitants. It dries in the hot weather and a temporary dam is thrown across the river every year and the little stream of water is made to pass by the ghâts of the temple of Sangameshvar. A peon is appointed to supervise and see the directions of the committee duly attended to. These arrangements last from January to June and the Municipality spent Rs. 69 on them in 1886-87. There is one well in the town filled by rain water which is not drinkable. At Jejuri town the water-supply is received from Holkar's tank. This tank receives water from the valleys of Kune Pattar and Kaver Khind. The Municipality have constructed four cisterns to the north of the town, and into them tank water is received by pipes. Surrounding these is a stone pavement used for the purposes of washing clothes. Cattle are generally watered here but the owners are strictly prohibited to let the animals go into the tank. There are five wells with brackish water. The tank water is guarded by a peon engaged on a pay of Rs. 7 per mensem. The total expense incurred on account of water was Rs. 543. The water-supply at Bárámati town is chiefly derived for four months from the river Káshi and during the remaining eight months from zirás (springs) dug in the river bed. Three zirás are permanently built in the river bed and the others are excavated in the sand according to the increasing demand of water. There are 5 public wells with, and 1 without steps, in the town containing brackish water. There are 10 draw wells of brackish water. Bhargaoram tank, situated to the north-west, supplies water to the inhabitants of Indápur town. This tank is in good order and feeds about 182 private and 4 public wells and some others in the adjoining garden lands. The town of Sirúr obtains its drinking water-supply from the river Ghod. In the hot season holes are dug, and for about 5 months peons are entertained to look after the water arrangements. The water scheme undertaken last year was completed, and the water which is unfortunately brackish is distributed in the town by means of pipes. A new tank to the west of the town of Talegaon Dábháda was built at a total cost of Rs. 43,000, and a further sum of about Rs. 2,000 will still be required to carry the work to its completion. This water is distributed by means of iron pipes in the town. The water in the old Dábháda tank situated to the south will be used for washing, bathing, and watering cattle. There is a nála to the north of the town. A limited quantity of drinking water is supplied to the town of Lonávla through pipes from the Railway Company's reservoir at Bhusi, two miles distant. The water bill paid during the year to the Railway Company amounted to Rs. 163. At Khed the water-supply is derived principally from the river Bhíma and partly from private wells and a nála close to the town with running water during six months of the year. A peon is entertained during the hot season to preserve the water from pollution. The town of A'landi has its water-supply from the river Indráyani and from the nálás known by the names of Bhágirthi and Kuberganga. There are 10 wells, 3 with and 7 without, steps. Junnar town being situated above the Kukdi river bed, and the Municipality having no other supply than the Bárábáodi, the Andharbáodi and the Kumbhár Talav, a tank was built to the west of the town at a cost of Rs. 37,000 to the Municipality by the Irrigation Department some two or three years ago. The Municipality has not taken charge of this work as yet, being doubtful of its success. There are also some fresh water wells in the town. The Poona Suburban Municipality receives its water-supply from the Khadakvásla Canal, wells, and Moola-Mutha rivers.

Sásvad.

Jejuri.

Bárámati.

Indápur.

Sirúr.

Talegaon Dabháda.

Lonávla.

Khed.

A'landi.

Junnar.

Poona Suburban Municipality.

Islámpur town is scantily supplied with water. It has only three tanks, one dug during the famine year. They have no springs. No wells in the town. The water-supply to the town of Ashta is received from wells and tanks,

Sátára Collectorate, Islámpur.

Ashta.

Tásgaon.

and in the hot weather from the river Krishna. There is a large stream flowing through the town of Tásgaon. In the months of April and May when the supply becomes deficient, holes are dug in many places in the bed of the stream. There are also 312 wells. Of these, one has been constructed by the Municipality near the municipal dharmshála. In addition to these wells there are 2 tanks which supply

Vita.

water for cattle in the rainy season only. Vita town is surrounded by streams which supply it with water for eight months. For the remaining four months water is obtained from "hels" dug every year in the bed of the streams. There are 5 public and 15 private wells.

Maini.

The town of Maini stands on the bank of a large stream which supplies it with sufficient water during the whole year. There is one well built by the Municipality near the municipal office, and there are 60 private wells in the town, all of which are abundantly

Pussesávli.

supplied with water. At Pussesávli there is a large stream on the eastern side which supplies water for the whole year. There are two wells built by the Municipality which also supply drinking water. There are 13 other private wells. Mhasvad town stands

Mhasvad.

on the bank of the river Mán which supplies water during 8 months. In the hot season 5 wells constructed by the Municipality in the bed of the river are cleaned of the sand, &c., accumulated in them. There are no private wells in the town. There is one well near the dispensary built by the Municipality which supplies water during the whole year, but its supply is small. The water-supply at Shingnápur

Shingnápur.

is on the whole good but not as pure and wholesome as desirable. It is received from one large and one small tank, and from 13 wells, of which 4 are with steps. At Malcolmpeth

Malcolmpeth.

the water-supply is received from a lake—the Yenna tank, from two tanks—the "Elphintone" and the "Bishop's," from 57 wells—25 public and 32 private, and 11 springs—7 public and 4 private. Of these sources the Yenna Lake, the two tanks, and 12 public and 13 private wells, and 2 public and 3 private springs, supply water throughout the whole year. The tanks and wells in the station are cleaned out at the end of every hot season.

Sholápur Collectorate, Sholápur.

The city of Sholápur is supplied with Ekrúk tank water. Besides this, Sidheswar tank and Khandobá's tank, situated respectively to the east side of the Fort ditch and east and west side of the town, and about 6 wells with and without steps situated in and about the Sadar Bázár and Modikhána, and about two dozen wells with and without steps situated in different parts of the city and Sadar Bázár, are made use of for washing and bathing purposes only. The total expenditure on account of water amounted to Rs. 34,279 during the year, of which the fuel—firewood—amounted to Rs. 18,747, and water establish-

Bársi.

ment Rs. 15,532. At Bársi town there are 22 wells with steps and 26 without steps belonging to the public and 72 belong to private individuals. These all give a good supply of water. There is a reservoir constructed by the Municipality, which keeps the

Karmála.

wells in the town supplied with water. At Karmála town the water-supply is from 2 tanks, and from 44 wells and 1 brook running from west to north. At Pandharpur town

Pandharpur.

the water-supply is from the river Bhíma on the eastern side and the municipal tank south-west of the town, from which distributary pipes run throughout the town. This latter supply has lately become impure. There are 14 wells in charge of the

Sángola.

Municipality of Sángola town and 13 belong to private individuals. They all supply drinking water. There is a nála which runs through the town and supplies water for eight months only.

Belgaum Collectorate—Belgaum.

143. *Southern Division.*—The water-supply of the city of Belgaum is obtained from wells only. There are in all 19 public wells, of which one is still under construction, and 1,273 private wells, of which 11 were constructed

Nipáni.

Athni.

during the year. At Nipáni the water-supply is received from 5 wells with steps and 7 without, and from 3 tanks. Of the 2 tanks at Athni town the one used for drinking was deepened at an estimated cost of Rs. 7,675, so that it may hold water sufficient to last for two years at least. It is under contemplation to feed the tank by means of a small nála which runs for four months in the rainy season. It is about ¾ths of a mile from the tank. There are 113 wells; of these 14 contain sweet water. Of these wells 4 are set apart for Mahárs, Mángs, Chámbhárs and Bhangis. It is intended to convert these step-wells into draw-wells. Rs. 188 were expended in repairing wells, &c.

Gokák.

The River Ghatprabha provides water to the inhabitants of Gokák town. There are 36 public wells, of which 10 have steps and 4 are in charge of the Municipality. Only 3 wells out of 36 have sweet water. During the hot weather the Canal authorities should allow the townspeople to use the canal water.

Saundatti Yellama.

Yamkanmardi.

At Saundatti Yellama a pond is being built near Arshan bund on the hill for pilgrims to bathe. At Yamkanmardi town the water-supply is from 20 wells, 3 being step-wells, and 1 tank.

Dhárwár Collectorate—Dhárwár.

Navalgund.

Nárgund.

Háveri.

At Dhárwár the water-supply is from Moti Táláv tank fed by the new municipal tank, when necessary, and sweet-water wells on the north and south and north-east of the town and from some wells of brackish water in the middle of the town. Rs. 166 were spent by the Municipality of Navalgund on water-supply. At Nargund the amount spent on repairs to tanks within municipal limit was Rs. 77. At Háveri town the water-supply is insufficient, being from one tank and a few wells.

Bijápur Collectorate, Bágalkot.

A well was repaired at Bágalkot town at a cost of Rs. 7.

Kánara Collectorate, Kumta.

The water-supply in Kumta town is abundant and of a fair quality, and is derived from 815 wells and 26 tanks. Two mu[illegible]pal tanks at Chitrigi, a village within municipal limi[illegible] ye[illegible] cleaned out, and the men and cattle passing by the Manaki Naka were supplied with drinking water during the hot season by a temporary sepoy appointed for the purpose. During the year under report a well was dug near the fish market for supplying water for cleaning the market daily and also for supplying water to the municipal Bhangis, Shoemakers, Mahárs and other low caste people who had hitherto a great difficulty in getting water from a distant place. Survey No. 33 at Herwata, a village within municipal limit, is not yet handed over to the Municipality. The Collector has been again requested by the Municipality to settle the matter as early as convenient, as there is a pressing want of [illegible]ity there for the use of men and cattle coming down from the Siddápur [illegible] a tank

Sirsi.

Gokarn.

At Sirsi town the water-supply is from 6[illegible] Gháts. and 11 ponds or tanks. Only 28 wells are m[illegible]5 wells There is no want of water-supply at Gokarn [illegible]unicipal. each compound has its own well of plentiful [illegible]own, as water. Besides this there are many ponds in the town. There is a large [illegible]pring tank called the Koti-tirth in the town, which has been repaired at a c[illegible]acred Rs. 80 during the year.

Haliyál.

The number of wells and tanks within municipal [illegible]st of is 302 and 30 respectively. At Haliyál town th[illegible] limit are 18 wells with steps, and 24 without steps and 5 tanks within municipal limit.

Ratnágiri Collectorate, Vengúrla.

The town of Vengúrla is well supplied with water from a tank called Náráyen tank half a mile to the north whence the water is brought into the town by an iron main. There are 13 troughs and 18 taps for public use. There are some tanks and a river of sweet water across which a temporary dam is built every year by the Municipality. There is one public well and 503 private wells. Rs. 2,357 were spent during the year for completing the work of building a pucca

dam to prevent leakage from the Náráyen tank which was begun last year. Rs. 32 were also spent this year in building a small tank near the bandar.

Rájápur.

At Rájápur a dam has been built across the Kadauli river at a distance of three miles from the town whence the water is brought by a stone channel. The Municipality has resolved to replace the stone channel by an iron main. There are three reservoirs, four troughs outside the town, and 49 taps in the town by the sides of the roads. There are also two troughs near the Hindu temples and four near the mosques. There are 49 house connection pipes, 230 private wells and 16 tanks. To the east of

Ratnágiri.

Ratnágiri there is a small village called Nachana, and from a spring in that place water has been brought by means of iron pipes for the use of the inhabitants of Ratnágiri town. This water is first received in a reservoir about 100 feet square cut out of the laterite rock just on the outskirts to the east of the town on a high level, and thence it is distributed by means of pipes. Stand-pipes have also been erected at different places. There are 475 wells, out of these about 250 supply good drinking water. There are also 13 tanks. Two tanks only supply water during the whole year. To the north-east of this town there is a small spring called Fanshee. The

Chiplún.

water-supply of Chiplún town is received from 163 wells and 10 tanks. 52 wells are supplied with wind-lasses turned by hand and eight turned by feet. The Shiva and Kamtha rivers are dammed. The Rám-tirth requires repairing. Surya Kund has steps. All the

Dápoli.

tanks are in a dilapidated state. At Dápoli town the supply of drinking water is from natural springs and wells. There is also a river running through the town from south to north. The banks of this river have been supplied with steps at various points.

Kolába Collectorate—

Alíbág.

Pen.

Roha-Astami.

The town of Alíbág receives its water-supply from the Weshwi Tank, and from about 10 public and 379 private wells. At Pen town the drinking water-supply is received from the municipal tank. There are four other tanks and 156 private wells. The water-supply is abundant at Roha-Astami and is received from the water-works erected by the Municipality at Karewane Hill. There are also 6 tanks, of these the embank-

Mahád.

ments of 2 are built up. The town of Mahád is not supplied with pure and healthy water, as it is flooded every year in the monsoon. The supply is received from 1 public and 120 private wells and 9 tanks. Of these only 2 are utilized for drinking purposes

Panvel.

throughout the year. At Panvel town the water-supply is insufficient and is derived from six tanks and 114 wells. There is also the river Gadhe at about a mile's distance which supplies water to the inhabitants. The water of the Wadhala and Vishrala tanks is used for drinking purposes till March. The Municipality has made arrangements to construct new water-works, which will be commenced next fair season. There

Uran.

is a tank called Bhimale at Uran town covering an area of 6 acres, and supplied by springs; it is kept solely for drinking purposes. Rs. 11 were spent in cleaning it. There are 7 other tanks. There are also 5 masonry wells belonging to the Municipality, and 163 pucca built and 63 kutcha ones belonging to private individuals.

Karáchi Collectorate,

Karáchi.

144. *Sind Division*—During the year under report in Karáchi City the distribution pipes have been further extended, bringing the supply within the reach of the very poor population in the trans-Lyari district. The distribution pipes have also been extended in the city. The number of private house connections has also increased. The amount spent on water-works extension during

Kotri.

the year amounted to Rs. 15,270. At Kotri the water-supply is received from the river Indus flowing close to the city. There are 34 private wells, of which three have steps. The water is

Mánjhand.

used for gardens. At Mánjhand the water-supply is also received from the river Indus flowing to the east of the town. At Sehwán town the water-supply is received generally from the canal and

Sehwán.

Bubak.

from two never-failing wells of sweet water. The town of Bubak is supplied by the Dunsterwah which flows

near the town, and from one sweet water well. There are 2 other wells under construction. There are 17 tanks within the limit of the Tátta Municipality, of which 7 are used for drinking purposes. Besides these there are two wells—one municipal, the other private—of sweet water. The repairs made to them during the year amounted to Rs. 16. At Keti Bandar the water-supply is received from the Hajawra branch of the river. There is also a dhára or inlet from the river on the east of the town, which twice in the day receives a fresh supply, and is utilized mostly for irrigating lands. There is one well, a tank, and a pond, from which drinking water-supply is received by the inhabitants of Mirpur-Batoro town. Rs. 46 were expended on repairs to the tank during the year.

Tatta.

Keti Bandar.

Mirpur-Batoro.

The changes in the arrangements for water-supply effected during the year are:—A public water service in Khair Shah jo Pirr; a public water service on the Fauzdári road at the entrance of Akal Bhunga Lane. Bathing place near Hindu Masan. Bathing place near Mahomedan cemetery. 27 private water services have been put up during the year, and new machines for the three lifts, *viz.*, the Fort, the Cantonment, and the river, have been purchased. The drinking water-supply of the inhabitants of Hála town is from 23 wells and also from the canal, which runs on the north side, and within easy reach of the town, from which people take their drinking water during the inundation season. There is also a tank. At Matári town the water-supply is received from a tank and a hollow. Both are fed during the inundation season by the Sarfrazwah. The water from Rájwáh is freely used during the inundation season, and after the subsidence of the inundation people resort to the sweet water wells. There are two tanks in the town of Tando Alahyar, of which one is used for drinking purposes. During the inundation season river water from the Gaboro Canal is used for drinking purposes. There are 21 wells. At Tando Adam town well water is used for drinking purposes. An inundation lake called Dhand is used for nine months for drinking purposes. There is also a tank. At Nasarpur town there is a dhára or hollow on the south-west which is filled with water from the Sijawal Canal during the inundation season and the people use this water for drinking purposes. There are also 10 wells used for drinking purposes. There are 12 wells in Shahdádpur town which are used for drinking purposes. There are two tanks and one hollow which are filled in the inundation season. Tank water is used for drinking and hollow water for bathing, washing, and watering cattle. Well water is used for drinking purposes at Kandiaro town. There are also two tanks which are filled from the Nasrat and Fatima Canals. At Naushahro well water is used for drinking purposes. Out of 35 wells one has been built by the Municipality and the other at the cost of local funds. There is also a municipal tank. This tank only holds water for six months, and afterwards filled by Kur Huson. At Bhiria town the supply is from 12 wells, one belonging to the Municipality. There is also a tank with steps, and is fed during the inundation season by the Government canal Imam Aliwah.

Hála.

Matári.

Tando Alahyar.

Tando Adam.

Nasarpur.

Shahdádpur.

Kandiaro.

Naushahro.

Bhiria.

The drinking water-supply to the city of Shikárpur is from 187 wells, 74 of which were cleaned and repaired by the Municipality. Most of the wells have cisterns built of burnt bricks and lime masonry to catch and collect the waste water. These cisterns are emptied twice a day and the water is used for watering roads. At Rohri the chief water-supply is received from the Indus. There are also six private wells of pure water kept in good repair. The supply of water is good and abundant at Ghotki town, being from 45 pucca and 51 katcha wells and from one tank to the east of the town.

Shikárpur Collectorate, Shikárpur.

Rohri.

Ghotki.

The water-supply to the town of Jacobabad is from wells, municipal tank and from three branch canals running through the town in parallel lines.

Upper Sind Frontier, Jacobabad.

145. *Drainage.*—In some municipal towns there are open masonry side drains in the main streets, in others there are mere earth trenches, in some there are cuttings, and in some, owing to the towns being situated on an elevated ground, there are natural drains to carry off rain water. In some municipal towns there is a great want of drains, but owing to the insufficiency of funds the Municipalities are unable to undertake these works. In Dholka town the Public Works Department have commenced the cleaning of the drains late in the season. At Nadiád the Irrigation Department is making enquiry for improving the drainage system. The Dákor Municipality has sanctioned Rs. 700 for repairs to the existing drains and for the construction of new gutters on the roads. At Nagar Rs. 401 have been laid out on construction and repairs of drains. The Municipality of Bhingár has proposed to spend Rs. 200 in constructing new gutters, and measures will soon be taken to commence the work. At Shirpur one new gutter has been built during the year. The Municipality of Taloda has spent Rs. 499 on constructing new gutters. Rs. 124 were spent on masonry drains by the Municipality of Prakásha. The Sinnar Municipality has expended Rs. 30 on drains. Seven receptacles were built by the Municipality at Jejuri at a cost of Rs. 47 for storing the refuse of some houses. Rs. 28 were spent on repairs to drains by the Municipality of Lonávla. Rs. 15 were spent on repairs to drains by the Municipality of Máyni. At Pussesávli Rs. 21 were spent on repairs to drainage. The Municipality of Sholápur has expended Rs. 2,614 during the year on new drains. The Kárwár Municipality has spent Rs. 23 on repairs to drains. The Municipality of Kumta has expended Rs. 199 on repairs to drains and bridges. In Kárachi City a good deal has been done in this direction, especially in the Lyári and old town quarters. Along the north bank of the Lyári are situated very many bathing gháts which are now supplied with Malir water in abundance. The waste water from these gháts was formerly run into the dry bed of the river and no nuisance was created thereby. Since the introduction of the Malir water the quantity used at the bathing gháts has increased very much and the consequence is that the bed of the river was becoming a serious nuisance owing to the amount of stagnant water collecting there. To remove this water the Municipality has laid earthenware pipes under the bed of the river for a distance of 3,400 feet. To this main all the bathing gháts will be connected by 3-inch earthenware pipes. A number of the connections have already been made, very much to the improvement of the locality. The remaining connections are in progress. In connection with this subject it is necessary to mention another improvement which has been carried out during the year. During high tides the sea water rose in the Lyári river, and filling every hollow and depression in its bed, remained stagnating after the tide had receded opposite the Khoodi Hindu temple. The nuisance was especially aggravated by the people throwing into the water offerings of flowers and rice, &c. To obviate this nuisance a masonry bund has been built across the river to the west of this point. The sea water is thus prevented from flowing up the river. The top of the bund is a few inches above the highest spring tides and arrangements have been made by means of a large nine-inch valve for running off the water when the river has been in flood. The drainage scheme by the Engineer and Secretary to the Municipality is still under consideration. The Municipality of Tatta has under its consideration an improved system of drainage. The Keti Bandar Municipality has built 4 open drains behind the town at a cost of Rs. 77 in order to facilitate rain water being carried off and thus prevent the accumula-

Dholka. Nadiád. Dákor. Nagar. Bhingár. Shirpur. Taloda. Prakásha. Sinnar. Jejuri. Lonávla. Máyni. Pussesávli. Sholápur. Kárwár. Kumta. Karáchi. Tatta. Keti Bandar.

Hyderabad.

tion of water in certain low-lying spots. At Hyderabad the work of draining off foul water from the water services on the east of the city is in progress. The Municipality comtemplates paving the lanes in the city, some of which have been taken in hand. The Municipality of Sukkur has still in hand the plans and estimates for the improvement of the underground drains, pumping, flushing, &c., having been returned to the contractor for alterations and additions and are expected back shortly. An improvement has been made in two of the underground drains during the year. The one in Blacksmith Lane New Sukkur, has been taken up altogether and a surface drain constructed instead. The upper portion of the underground drain running along Shikárpur road has been removed the whole length with a view to its conversion into a surface drain. This was rendered necessary owing to the drain being constructed too small to admit of its being properly cleaned out, thereby causing an intolerable nuisance. To do away as much as possible with the bad odour which arises from the drain in the hot weather, water is twice daily poured into the upper ends of the smaller drains by Pakháli Bhistis (3 in number), and as the water accumulates in the drains it is pumped out as deemed necessary from time to time. These drainage works cost the Municipality Rs. 3,280.

Sukkur.

146. *Cesspools.*—There are but few municipal cesspools, but in nearly all towns most of the private houses have them, and the owners at intervals see to their cleanliness at their own expense. 1,587 feet of new gutters have been constructed by the Jalgaon Municipality during the year. In Karáchi about 25 new cesspools have been constructed after the standard plan adopted by the Municipality. Their conservancy receives careful attention. The total number of cesspools is about 825. The Sukkar Municipality has constructed one new cesspool during the year.

Jalgaon.
Karáchi.
Sukkur.

147. *Scavengering.*—The usual staff of sweepers is entertained by each Municipality to keep the town and streets clean. Dustbins are provided in most towns in convenient spots, and emptied daily. Other arrangements same as last year.

148. *Latrines.*—The larger number of municipal towns have public latrines, and privies in some towns, are cleaned by municipal sweepers. Night-soil from latrines is carted to depôts about a mile or two from the towns, and is either buried or converted into poudrette. At Dholka there are nine public latrines built by the Municipality, out of which six are of brick and chunam, and one with walls of sheet iron. They are cleaned twice daily, and the nightsoil taken away to a distance where it is dried to be sold for manure. The expenditure incurred on this account during the year was Rs. 1,107, being the amount of pay of one Mukádam, 18 Bhangis and 3 carts, and cost of repairing latrines, &c. A wall on the western side of the latrine outside the Bálápir gate was built at Kaira during the year. At Nadiád a new latrine has been built during the year by the Municipality. At Dákor 9 privies were built during the year. In Godhra town the construction of a new latrine is in progress. In Surat city a shed was erected for keeping nightsoil carts at a cost of Rs. 528, and Rs. 600 were expended for 6 new tipping carts and Rs. 2,213 were spent on constructing 13 new latrines during the year by the municipality. At Kályan Rs. 860 were spent by the municipality on constructing 12 seats of public latrines at Lendi Tank and 3 seats near the Railway station and dispensary. A new latrine was constructed at a cost of Rs. 61 near the public garden at Yeola, and repairs to the extent of Rs. 146 were made to old latrines. On public latrines the City Municipality of Poona has spent Rs. 260 during the year. The Sholápur Municipality has constructed 4 latrines of Horbury's patent at a cost of Rs. 1,000 during the year. The frameworks of the Horbury's patent latrines are of angle iron with cast-

Dholka.
Kaira.
Nadiád.
Dákor.
Godhra.
Surat.
Kalyán.
Yeola.
Poona.
Sholápur.

iron shields and side; the centre screens and roofs are of galvanized corrugated iron sheets, the whole being fastened with galvanized bolts and nuts. These latrines can be removed from one place to another at a very trifling cost.

Hubli. Karáchi.

The Hubli Municipality has improved latrines in the dispensary. The Municipality of Karáchi has built 6 new latrines and repaired others.

149. *Urinals.*—Some of the municipal towns have urinals, and these are attended to by Bhangis and cleaned and disinfected every day. The Poona City Municipality has spent Rs. 166 in constructing V-shaped urinal gutters. The Karáchi Municipality has ordered from England several ornamental cast-iron urinals to be erected in convenient places of the town.

Poona. Karáchi.

150. *Markets.*—In most of the towns there are no regular built markets. A new vegetable market was built in Dholka town in 1882-83 at a cost of Rs. 4,015. It is however to be regretted that the vegetable sellers have persistently refused to remove from their private shops which they now occupy. A new market which was under construction by the Municipality of Dohad was completed and opened on the 21st October 1886. It is 91 feet long and 60 feet 6 inches broad. There are altogether 90 stalls. Vegetables, condiments, tobacco, &c., are sold therein. The expense on the market account amounted to Rs. 2,700 during the year, and the cost of its establishment was Rs. 48, the income during the year was Rs. 109. At Anklesvar (1) vegetable market of 20 stalls, and (2) meat, beef and fish markets of 10, 5 and 12 stalls, respectively, were constructed during the year at a total cost of Rs. 8,625. A slaughter-house has been built at a cost of Rs. 1,099. At Jalgaon the municipality has built 43 stalls for the weekly bázár and 6 for the daily vegetable bázár. The municipal income from the weekly bázár amounted to Rs. 476 and from the daily bázár Rs. 117 for this year. A mutton market and a slaughter-house has been newly built during the year on the south of the town, and a beef market is under consideration. At Bhusával a slaughter-house was built. Sávda Municipality has built otás for bázár during the year. Four otás were constructed at a cost of Rs. 28 in Sinnar town for the daily bázár. The Poona City Municipality has expended Rs. 58,983 during the year on central vegetable and fruit market. The Ashta Municipality has constructed a new market. Enlarging the work of one of the two mutton markets in the Sholápur City has been commenced, and cost the municipality Rs. 5,059 up to the end of the year 1886-87. This work will be completed during next year. The Municipality of Kumta has spent Rs. 52 on constructing a mud wall round the fish market and Rs. 71 were spent on repairs. The extension of the fish market was completed during the year. The Sirsi Municipality constructed a wall of laterite with gates and compartments around the space to be used as a market for animals at a cost of Rs. 896. The Municipality of Vengurla has spent Rs. 959 on market works. The Municipality of Ratnágiri has spent Rs. 125 on building a new Barrakhee to sell meat. The Municipality of Karáchi has made some addition to the Boulton Market and the mutton butchers and fish sellers are now well accommodated in it. The Empress Market in the Sadar Bázár was commenced during the latter part of the year, and the foundations have been laid and the superstructure completed for a couple of feet above ground level. The work of constructing a new market at Tatta will be carried out by the Public Works Department and a sum

Dholka. Dohad. Anklesvar. Jalgaon. Bhusával. Sávda. Sinnar Poona. Ashta. Sholápur. Kumta. Sirsi. Vengurla. Ratnágiri. Karáchi. Tatta.

Hyderabad. Tando Adam. Naushahro. Sukkur. Lárkhána. Kambar.

of Rs. 5,641 is sanctioned for the same. At Hyderabad a new market has been constructed in Tando Mir Mahomed. At Tando Adam the construction of a new market is under completion. Two shops were added to the existing market by the Municipality of Naushahro. A new market for selling fish has been constructed at a cost of Rs. 344 in the Victoria Market compound, New Sukkur. There are in all now five markets in Sukkur. The Lárkána Municipality has advanced Rs. 2,278 for paving the bázárs. The Kambar Municipality has built some shops at a cost of Rs. 134.

151. *Burial-grounds and Cremation Ghâts.*—There are several of each of these outside each town, and the latter are, as a rule, on the banks of rivers.

152. *New Works.*—At Kaira a wooden shed near the junction of the Watrak and Shedi rivers has been erected by the municipality for the protection of people going to burn dead bodies at a cost of Rs. 207. A foot-path like a bund (dam) in the water-course near the municipal office from Pura gate to Amlapura has been built at a cost of Rs. 199 for the prevention of water of the river Watrak coming into the water-course (vehela) when flooded. Construction of concrete gutters, drainage for wastage water of wells, and repairs to masonry gutters cost the Municipality of Nadiád Rs. 534. At Kapadvanj a new metal road was constructed by the municipality. In the Broach City new works to the extent of Rs. 11,658 were constructed, mostly paving several roads, constructing steps, and rebuilding a portion of the wall of the Ratan Taláv. Besides the above several other repairs were executed to roads and streets throughout the town which were cut up during the rains and required repairs very badly. In Mándvi town two new roads were constructed at a total cost of Rs. 997 and a new ferry boat was supplied at a cost of Rs. 399 by the municipality. The Municipality of Bassein has constructed a new road 280 feet long at a cost of Rs. 101. The Nagar Municipality has spent Rs. 534 on construction of roads, new works, and repairs. In Amalner town Rs. 91 were spent in making new gutters. The Municipality of Shirpur has constructed a road about 450 feet long during the year at a cost of Rs. 957. At Betávad Rs. 12 were spent for laying down an underground pipe for drainage purposes to the length of 17 feet in the Ram-Mandir lane. The Yával Municipality has built a new gutter. The Municipality of Varangoan has spent Rs. 75 on road repairs. The Dhulia Municipality has metalled a road 1,200 feet long and 711 feet of masonry open gutters were made. The Municipality of Málegaon has constructed two new roads with side gutters of pucca masonry at a cost of Rs. 764. The City Municipality of Poona has spent Rs. 1,542 on laying down water-pipes and Rs. 215 on planting trees by road sides. Rs. 354 were spent on maintaining public gardens and Rs. 3,819 on road-improvement works. At Jejuri during the year the municipality has constructed seven enclosures for storing rubbish at a cost of Rs. 47 and a dharmshála for the use of pilgrims is being built, and the expense thereon has amounted to Rs. 2,346. The Indápur Municipality has constructed a new road to the south of the Bhargaoraon tank and a drain to the nála outside the Rámgate. The work of laying out and putting up stand-pipes has been carried out by the Talegaon Dábháde Municipality through the Public Works Department. Two roads, being approaches to the G. I. P. Rail-

Kaira. Nadiád. Kupadvanj. Broach. Mándvi. Bassein. Nagar. Amalner. Shirpur. Betávad. Yával. Varangaon. Málegaon. Poona. Jejuri. Indápur. Dábháde Talegaon.

Poona Suburban Municipality.

way station from the City and Cantonment and passing through the Poona suburban districts, were widened at the cost of the State by the Public Works Department.

Tásgaon.

A bridge over the nála near Bhilavdi gate was constructed by the Tásgaon Municipality at a cost of Rs. 1,206.

Mhasvad.

The Mhasvad Municipality has improved the road leading to the god Nágoba, and pavement was built to the well near the temple of Nágoba at a cost of Rs. 118.

Shingnápur.

The Municipality of Shingnápur has built 2 dharmsháláes and Bhawáni Ghát and Gupt-ling were repaired at a total cost of Rs. 1,880.

Bársi.

The Municipality of Bársi has constructed two dams and drains to several roads to the extent of Rs. 5,113 during the year.

Karmála.

At Karmála a new cistern has been built by the municipality.

Pandharpur.

At Pandharpur several new works were completed during the year: (1) dharmshála on the Sángola road, (2) the Bhangi quarter in the dispensary compound, and two wooden iron-barred doors to the compound wall, (3) three new stand-posts have been erected in the new Peith; (4) cattle-pound; (5) the guard's quarter for the travellers' bungalow near the municipal tank; (6) the retaining wall to the south of the Kubeer's Muth, and (7) semi-circular gutters are built in five different places of the town.

Belgaum.

At Belgaum a nightsoil depôt was constructed and some roads improved by the municipality.

Dhárwár.

The City Municipality of Dhárwár has spent Rs. 1,312 on improving roads, gutters, and deepening water-channel.

Háveri.

At Háveri Rs. 108 were spent on construction and repairs of roads by the municipality.

Bágalkot.

The Municipality of Bágalkot has spent Rs. 709 on repairs to existing roads.

Bijápur.

The Municipality of Bijápur has constructed a small slaughter-house and repaired a petty bowri in the Jumma Masjid Peith at a cost of Rs. 180, and a contribution of Rs. 1,800 was paid to Begum Tank water works, which is in charge of the Public Works Department.

Kumta.

The Kumta Municipality has placed Rs. 2,500 at the disposal of the Jubilee Committee to build a dharmshála in the centre of the town in commemoration of the Jubilee of Her Majesty the Queen and Empress of India.

Vengurla.

The Municipality of Vengurla has completed a dam to prevent leakage from the Náráyan Tank at a cost of Rs. 2,357. It has also built a small tank at a cost of Rs. 32.

Chiplún.

The Chiplún Municipality has spent Rs. 1,867 on constructing two new roads and in filling a deep ditch that was caused by a rapid flow of water near the dam at Kamtha.

Mahád.

The Mahád Municipality has constructed two new roads, one water trough on the Chandhar Tank and plantation of road-side trees.

Karáchi.

Rs. 37,515 were expended by the Municipality of Karáchi on roads and Rs. 4,898 were spent on paving the roads in the Sadar Bázár.

Kotri.

The Kotri Municipality has constructed a new road to Khánápur at a cost of Rs. 514.

Mánjhand.

The Mánjhand Municipality has constructed a bandar at a cost of Rs. 516 and a náka for collection of municipal octori at a cost of Rs. 15.

Tatta.

The Municipality of Tatta has constructed two new culverts and expended Rs. 286 to facililate drainage.

Keti Bandar.

The Keti Bandar Municipality has constructed a pond at a cost of Rs. 693.

Tando Adam.

The Municipality of Tando Adam has built a municipal hall for storing records, holding committee meetings and for the municipal Munshi.

Bhuria.

The Municipality of Bhuria has spent Rs. 500 on constructing bathing steps.

Shikárpur.

The new works which have been constructed by the Municipality of Shikárpur are the paving of roads, constructing steps to Gillespie Tank, a vaulted rest-house, and a rest-house at Masan and compound wall to Masan, and metalling Sind Canal road. Rs. 1,091

Rohri.

were spent by the Municipality of Rohri in constructing a small tank to collect rain water which formerly used to flood part of the town and undermine some of the houses. The

Kambar.

Kambar Municipality has built a verandah to the town Police station at a cost of Rs. 64. Only repairs to the extent of Rs. 106 were made by the Umarkot

Umarkot.

Municipality to dharmsháláes, latrines and markets.

Jacobadad.

The Jacobabad Municipality has constructed 3 pucca drains on road sides, 3 gutters for drainage purposes, 1 landhi for patients suffering from contageous diseases, 12 stalls for retail sale to the north of Menair Gunj and one compound for sale of grass.

LOCAL FUND CIRCLES.

153. *Northern Division.*—In the Ahmedabad Collectorate Rs. 18,793 were expended on water works. Out of which sum Rs. 9,961

Ahmedabad.

were spent in digging 22 new wells and 1 tank, and Rs. 8,829 were spent on repairing 27 wells, 18 tanks, &c., by the Civil Agency, and only Rs. 4 were spent by the Public Works Department for exploring the causes of the leakage of the Mandul Tank. In the

Kaira.

Kaira Collectorate under water-supply the expenditure amounted to Rs. 18,971, but most of the sum was expended on repairs to wells and tanks, &c., and only Rs. 1,893 were spent in sinking 9 new wells. In all there are 350 wells and 263 tanks completed since the commencement of the Local Fund. In the Panch Maháls the cost on

Panch Maháls.

this head amounted to Rs. 3,746, out of which Rs. 550 were spent on construction of a new well, and the rest of the amount was expended in cleaning and repairing wells and tanks. No expenditure was incurred during the year on water-supply in Broach Collec-

Broach.

torate, whilst a scarcity of water was felt in the western portions of the Vágra and Jambusar Tálukas, the Local Fund income being Rs. 1,42,262. In Surat Collectorate no artificial water

Surat.

works of importance other than tanks and wells exist. Water of rivers, creeks, and of tanks and wells are used for drinking purposes. A total expenditure of Rs. 26,377 was incurred from Local Fund during the year under report, out of which Rs. 14,831 were spent in connection with tanks and wells. In Thána Collectorate Rs. 15,446

Thána.

were spent in constructing new wells, cleaning tanks, executing repairs, and completing works which were left unfinished last year.

154. *Central Division.*—In the Ahmednagar Collectorate several useful works such as constructing new wells, deepening and

Ahmednagar.

repairing wells and constructing zirás were undertaken and Rs. 4,405 spent on them. In the Khándesh Col-

Khándesh

lectorate several new wells were built, many repaired, some deepened, some enlarged and some cleaned, so also embankments to nálás were made and parapet walls to wells were constructed.

Násik.

In the Násik Collectorate Rs. 3,362 were spent on repairs to wells. In the Poona Collectorate Rs. 7,911

Poona.

were expended on repairs to wells and tanks, for laying down water-pipes at Khadakvásla for supplying water to its inhabitants, and Rs. 837 were paid to Government for the supply of water at Ghorpadi and Yerrowda, and Rs. 100 were spent for cutting prickly pear.

155. *Southern Division.*—In the Belgaum Collectorate Rs. 8,145 were spent on sanitary works. Rs. 38,213 were expended by the

Belgaum.

Local Fund Department on constructing new wells, on improvements to houds and tanks and on con-

Dhárwár.

structing new roads in the Dhárwár Collectorate. In the Kánara Collectorate 3 new wells were under con-

Kánara.

struction but they remained incomplete during the year. Only Rs. 227 were spent on repairs to wells

Ratnágiri.

and tanks in the Ratnágiri Collectorate. In the

Kolába.

Kolába Collectorate 19 new wells, a dam at Sirowli, and Narangi and Mankoola water works were constructed during the year at a cost of Rs. 15,289 and Rs. 2,546 were spent on repairs to wells and tanks.

Karáchi.

Hyderabad.

Shikárpur.

Thar and Párkar.

156. *Sind Division.*—In the Karáchi Collectorate Rs. 1,402 were spent on works of water-supply and Rs. 1,430 on repairs to tanks and wells. In the Hyderabad Collectorate Rs. 624 were expended on wells. In the Shikárpur Collectorate Rs. 6,985 were spent on construction and repairs to wells. In the Thar and Párkar District Rs. 400 were expended in constructing a well and Rs. 586 on repairs to wells.

SECTION X.

PERSONAL PROCEEDINGS AND GENERAL REMARKS.

Preliminary remarks.

157. Although when this report is submitted to Government I shall have retired from its service, I think it my duty to write this section and to remark on the principal sanitary events of the past year.

Personal Proceedings.

158. In the last annual report the details were given of my tour in the commencement of 1887. On my return to Bombay I proceeded to Poona, where I stayed during the hot weather as I was anxious to continue my observations regarding the water-logged condition of the land below the canal during the hottest months of the year. I, however, visited Ahmednagar during this season. I stayed the rains at Poona, visiting Broach in July on urgent business. The greater part of November was passed in Bombay. I then proceeded to Surat, Broach, Nadiád and Ahmedabad and returned to Bombay by the close of the year, and then visited Sátára, Belgaum, Dhárwár, Hubli, Gadag, and Bijápur, returning to Bombay by the commencement of March.

Meeting with Municipal Commissioners.

159. At all the above towns, with the exception of Gadag, I met the Municipal Commissioners and tried to arrange with them for provision being made in their annual budgets for water-supply, surface drainage and conservancy, but with little success. At Gadag, although I attended the municipal office by appointment, only six Municipal Commissioners put in an appearance. I was therefore unable to address them on these subjects.

Report of Health Officer of Port.

160. The Health Officer of the Port has submitted a very interesting report giving full details of the work performed by him during the year, but I can only briefly allude to the more important points connected with it as it is impossible in a short review to do justice to all the subjects touched upon.

New Bill of Health.

161. A new Bill of Health in the following form has, by direction of the Government of India, been introduced; but, if I may venture to express an opinion, I would respectfully point out that the phraseology adopted is, to say the least, very unfortunate, for it commits the Government to a theory which as regards cholera was years ago shown by its late Sanitary Commissioner to be erroneous and which has been abandoned by nearly every medical man in India.

Although plague or yellow fever have never to my knowledge existed in Bombay and are not in present circumstances ever likely to be there met with, it may be desirable, on account of the suspicions entertained by foreign nations, regarding the state of public health in Bombay, to include them among the diseases (cholera and small-pox) which Government in its notification dated 15th September 1884, was pleased to determine were *for the purposes of Act VI of 1867* to be held to be infectious diseases dangerous to life. In my opinion the Bill instead of saying that "no case of infectious disease dangerous to life" should state in definite terms that no case of plague, yellow fever, cholera or small-pox exists on board. Such a declaration would be precise and much more accurate than the present phraseology; for, as the Bill is now worded, if I were Health Officer of the Port, I could not conscientiously sign it, for before I could certify that no case of infectious disease dangerous to life was on board, I should have to satisfy myself that no person on board suffered from either primary or secondary syphilis which is a truly infectious disease dangerous to life.

BILL OF HEALTH.

This is to certify that the ship (steamer) sailing under the flag and under the command of Captain of tons, bound for with a crew of persons* and passengers

* Including officers and able-bodied seamen.

and laden with a cargo of , is at the time of leaving this port in a satisfactory sanitary condition, and that no case of infectious disease dangerous to life exists among its officers, passengers or crew.

It is further certified that the public health of the town and port of Bombay is at the time of its departure ; that during the last week there occurred :

deaths from plague,
do. yellow fever,
do. cholera, declared by the Medical Board to exist in a form and that the public health of the environs is .

Dated Bombay, the 188 . } Health Officer of the Port, Bombay.

Cattle shipped for Mussowah inspected by a Veterinary Surgeon by order of Government.

162. By Government Resolution, Revenue Department, No. 8472, dated 12th December 1887, it was ruled that in case of vessels conveying a large number of cattle to Mussowah for the Italian Expeditionary Force, the cattle should, before being embarked, be examined by a qualified Veterinary Surgeon. This order is, from a sanitary point of view, most necessary, and the Health Officer has recommended that a similar order should be passed regarding vessels bringing cattle, horses, &c., to Bombay. The necessity for this was recently brought strongly to notice by a vessel arriving from the Persian Gulf with a cargo of horses among which glanders had appeared.

Outgoing vessels.

163. During the year 440 square-rigged vessels and steamers conveying 35,075 persons and 255 native craft with 5,953 persons on board and 18 pilgrim ships carrying 11,096 souls, or a total of 713 vessels and 52,124 persons, left the port after inspection by the Health Officer, against 781 vessels and 54,318 persons in 1886. Clean bills of health were given in every case.

Ship's bilges.

164. It is satisfactory to notice that Dr. MacCartie reports that much greater attention has been paid to the cleanliness of ship's bilges, and that no death occurred during the year on board ship from mephitic poisoning.

Troop-ships.

165. Clean bills of health were granted to 19 troop-ships leaving the port during the year without an inspection by the Health Officer of the port of their crews and passengers, on production of certificates stating that the vessels were in a satisfactory sanitary condition, and that there was no case of infectious disease dangerous to life on board.

Bills of Health granted to vessels proceeding to ports round the Coast, &c.

166. Clean bills of health were also issued to 398 vessels bound to ports round the Coast, Rangoon, Singapur, Hongkong, &c.

Quarantine at Suez.

167. During the year quarantine was imposed at Suez against Bombay for 66 days although only 262 deaths from cholera took place in the city of Bombay during it, and the disease was at no time declared by the Medical Board to exist in an epidemic form.

Incoming vessels.

168. During 1887, 810 steamers and square-rigged vessels carrying 16,209 passengers and 352 native sailing vessels with 2,200 passengers on board entered the port from ports other than Indian ports and 1,060 steamers and square-rigged vessels and 56,102 native sailing craft arrived in the harbour from Indian ports. All vessels entering the port have had free pratique, except in the case of three steamers which on arrival had the yellow flag flying on account of cases of small-pox having occurred during the voyage. All Her Majesty's troop-ships (11 in number) were, as usual, inspected by the Health Officer on arrival.

Pilgrim ships.

169. Ten vessels with pilgrims on board arrived in the port during the year. In those in which there had been cases of small-pox, the persons who were unprotected were vaccinated before being allowed to land. These vessels conveyed 5,726 pilgrims, among whom there were on the return voyage 494 persons admitted into hospital. (In one vessel carrying 703 pilgrims, no information is given as to the number of ad-

missions.) In three vessels conveying 614 pilgrims there were no deaths, and among the remainder 64 deaths occurred.

Cholera among harbour population.

170. Cholera broke out among the harbour population in July and lasted until November. In all there were 30 cases, 24 or 80 per cent. of which proved fatal. This great fatality of cholera among the harbour population has often before been noticed, but I regret that no measures have as yet been taken to provide for their treatment by having a hospital ship in the harbour.

Insanitary state of foreshore.

171. Dr. MacCartie again forcibly comments upon the very foul and insanitary condition of the foreshore of the harbour which, though an improvement is noticed in some of the bandars, is still in a most dangerous state and will remain so until Government is pleased to take energetic action. It is a standing disgrace to the harbour, and the blame for it, in my opinion, rests equally between the Port Trustees and the Municipal Commissioner. If foreign nations only realized the risk the harbour population is exposed to on account of the insanitary condition of the foreshore, I believe perpetual quarantine would be declared against Bombay.

Aid afforded by officers of the Department which, however, was crippled by the absence of 3 out of 6 of its officers.

172. I have, as usual, to bring prominently to the notice of Government the aid which I have received from the officers of the Department who have one and all during the year worked well and exhibited zeal and devotion in the performance of their duty; but it was crippled by the transfer in April of two of its officers (Drs. Clarkson and Tully) to the Military Department for service in Burmah, and by one officer (Dr. Channer) being absent throughout the greater part of the year on sick leave to England. No officers could be spared to supply their places, and the work has suffered most seriously, as the Civil Surgeons of Násik and Belgaum, except in a modified form, have not been able to make any inspection of the work of the vaccinators, although the Civil Surgeon at Rájkot has, with the concurrence of the Surgeon General with the Government of Bombay, been able to pass some time on tour.

Departure on furlough of the Consulting Sanitary Engineer whose appointment has not been filled up.

173. Among the events which have affected the Sanitary Department during the year, I must mention the departure in May last on furlough of Colonel Ducat, R. E., the Consulting Sanitary Engineer. This officer, since his appointment in October 1884, always afforded me the greatest possible assistance, as, from the training he had whilst in England under some of the leading Sanitary Engineers of the day, he was thoroughly acquainted not only with the theory but, what is equally, if not more, important, with the practice of Sanitary Engineering in all its details. Since his departure the appointment has remained vacant, and I have not addressed Government on the subject; for when in 1886 I asked Government to consider the possibility of their having to provide a successor and to notify to the officers of the Public Works Department the desirability of their making Sanitary Engineering the subject of their especial study whilst at Home on furlough, I received in reply such a decided and, as I considered, unmerited rebuff, that I did not feel inclined to expose myself to the chance of getting another. Government was pleased to inform me that it did not anticipate any difficulty in finding officers duly qualified to advise them in sanitary matters whenever the necessity arose. I, however, in this my last endeavour to improve the sanitary condition of this country venture to ask,—Is it really a fact that Government can command the services of experts in Sanitary Engineering? Does Government itself possess the knowledge or can it obtain the opinion of any one in this country qualified to say whether an Engineer is an expert in this branch of Engineering? I am firmly convinced that these questions must be answered in the negative. I cannot too forcibly point out that Sanitary Engineering is a special science and perfectly distinct from ordinary Engineering. It is not to be acquired from books but requires to be learnt in all its details, and must be seen and studied on actual works. It is also a

Sanitary Engineering a special study.

matter of notoriety that the officers of the Public Works Department have not as a rule had the chance of acquiring instruction in the practical details which, it is so absolutely necessary, should be thoroughly mastered. The sanitary mistakes which in past years have been made in many of our public buildings, &c., I can only describe as hideous, and they are still, I regret to say, being repeated. For example, I have only recently had forwarded to me for opinion the plans of one of our large public buildings which were designed to rectify the frightful mistakes of original construction which had already been the cause of one death in the building. These plans had received the approval of the Superintending Engineer of the Division, but when I came to examine them, I found that the most ordinary rules regarding soil-pipes, ventilators, traps and sewers had, through absolute ignorance, not been followed. I sent them back with the remark that I could not pass plans which were so grossly defective and which would, if carried out as designed, introduce deadly sewer air into the bed-rooms.

Experience of the past and present.

174. In my opinion Government would do well to obtain from England a trained Sanitary Engineer who has had practical experience in works of water-supply, sewerage, and drainage and in the sanitary construction of buildings. There is ample work for such an officer, and if he came we should not then find tanks made at great expense which will not hold water, or soil-pipes built inside the walls of buildings, or the other dangerous mistakes which are now met with in our public buildings.

Recommendation to bring out from Home a trained Sanitary Engineer.

175. But if this appointment cannot be made I submit the time has arrived when all the officers of the Public Works Department should be instructed in Sanitary Engineering before they come to this country, and should not only have been taught the theory but have been shown on works all the practical details of sewers and have studied the true principles of ventilation, house-connections, traps, &c. I shall be extremely pained if, in making these remarks, I cause offence to the officers of the Public Works Department, for whom, individually, I have the greatest possible respect; but to rectify mistakes in details of Sanitary Engineering involves not only a vast amount of money but, what is more important, they are the cause of valuable lives being lost and they bring the utmost discredit on structural sanitary works and thus injure the cause of sanitary reform in India, which to me is an unpardonable offence.

Necessity for all officers in Public Works Department being taught the practical details of Sanitary Engineering.

176. In connection with this subject, I may mention that during the year the papers regarding the nuisance said to be caused by the new sewerage system lately introduced into the Marine Lines were forwarded to me for report. Colonel Ducat, before he left, brought to the notice of Government the great danger caused by the Municipality having laid down in the Marine Lines a pipe sewer, into which the house-connections emptied, which was throughout its entire length unprovided with any means of ventilation; and in reporting on this subject to Government I said that I entirely concurred with Colonel Ducat's opinion as to the danger of the unventilated condition of the municipal sewer, but after personal inspection was able to point out that the nuisance complained of was to a large degree to be referred to the fact that it was not flushed regularly, as it should be at least once a day, and that the Municipality had not employed any staff of sweepers to remove the solid matters which were brought down by the sullage, and deposited on the sole of each manhole, where they underwent active decomposition, as evinced by the bubbles of sulphuretted hydrogen gas which, as I showed the Municipal Commissioner at the time of our visit, was being freely evolved from the black stinking putrefying deposit and which of course escaped up the house-connections and so caused a nuisance. The necessity of having side chambers at the manholes for ventilation, as recommended by Rawlinson, is also apparent.

Colonel Ducat's report on the Marine Lines sewerage.

Recommendation regarding municipal sewer in Marine Lines.

177. I also pointed out that at some point in the course of every house-drain before it reaches the main sewer there should be complete air disconnection, and suggested the use of a Buchan's intercepting trap which consists of a syphon through which all the liquids of the house must pass, and which therefore must always be charged with water, whilst the house is inhabited, and in which there is an opening communicating with the external air on the house side of the syphon which would provide an escape for sewer air if the syphon is forced but which chiefly acts as an inlet for fresh air for the ventilation of the house-drain itself, an outlet-pipe being of course formed at its head.

Recommendation regarding house-drains.

178. These Government drains should be flushed regularly once a day, and the manhole covers be frequently opened so that any silt might be removed at frequent intervals—certainly not less than twice a week. The manholes near windows should be closed and the pipes from the bath-rooms now discharging into them should be led to a manhole at a greater distance. At the head of each house-drain there should be a ventilating shaft carried up to discharge any gas to the upper stratum of air. Much of the nuisance complained of was due to filthy local conditions found in the compounds and caused by the servants throwing all kinds of filth out of their windows, pools of water below stand-pipes, filthy privies, &c.

Necessity for regular flushing and for the removal of deposit.

179. Government was pleased to sanction my suggestions in their entirety and the Municipal Commissioner has been good enough to promise to make arrangements for providing the municipal sewer with means of ventilation; but the question has a wider significance than merely the sewerage of the Marine Lines as it opens up the whole subject of the system of ventilation of sewers now carried out by the municipal authorities in Bombay.

Government orders these recommendations to be carried out.

180. The Municipal Commissioner was good enough to accompany me through the native town and to show me the various systems in force both as regards the sewers and the house-connections. I afterwards wrote to him on the subject of our visit and told him that whilst approving of the arrangements which have been made on the house side of the sewers, I most strongly disapprove of the absence of efficient ventilation along the main sewers.

Ventilation of main sewers of Bombay.

181. There appear to be two systems of ventilation employed. The one which has been adopted at the sewer along the Queen's Road consists of lofty brick shafts which have been erected on the side of the road which are connected with the sewer by a pipe. The interior of the shaft is divided by a diaphragm, and each channel being 4″ × 14″ affords a total area of 56 square inches. These shafts are not erected at uniform distances, but are said to be 200 *yards* apart. The second system is that adopted for the sewers in Khetvádi where there are no shafts, but the ventilation of the sewers is supposed to be effected through the manhole covers below which is a tray fixed for the purpose of collecting the drift and other matter falling from the surface of the street through the holes in it. On either side of the tray are ventilating openings, which are, in my opinion, too small and which it was evident could not act as the road-drift had effectually blocked up the passage of air either into or from the sewer.

Two systems in operation.

182. The manhole covers in every case had got so jammed that much delay was caused, and in one instance we had to leave because the workmen could not open the cover. The state of the covers and trays conclusively proved that they had not been opened for a lengthened period, and as a corollary that the silt, &c., brought down by the sullage to the manholes had not been removed from the sewers.

Manhole covers not been opened for a considerable time.

183. It is impossible, however carefully constructed sewers may be, that they will work without causing an intolerable offence if this silt, &c., is not periodically, say twice a week, removed from the sole of the sewer at the manholes; and it

Necessity for frequent cleansing.

may be accepted as an axiom that in any well constructed and sufficiently ventilated sewerage if a stench is perceived at any manhole it is the result of careless supervision and a conclusive evidence that the solid matter brought down by the sullage has not been removed.

House drains : danger of traps being forced.

184. As regards the house-drains the only defence to prevent the gas from the main sewer finding its way into houses, &c., is the seal of the syphon in the sewer-pipe connecting with the house and the ventilating pipe carried above its roof. This, though very good for the purpose, if the main sewers are properly ventilated, is not a sufficient protection. We all know in practice that water seals get occasionally unsealed and in any case water most rapidly absorbs gas, and when saturated with it will allow its passage as if there were no water at all. The ends of the ventilating pipes also are liable to corrosion and may leak at any time, and the gas in the sewer is at all times in present conditions trying to escape to the upper level and must keep the water seals surcharged.

Freest ventilation required.

185. All sanitary experts, whether engineering or medical, are unanimously agreed that without the freest ventilation of main sewers and the admission of the external air into them there can be not only no safety but the most extreme peril to the inhabitants of the area in which such sewers are laid down.

Baldwin Latham's opinion.

186. The Bombay Drainage Commission recommended that the main sewers should be ventilated at the surface of the roads at distances of 200 feet apart and at every junction. This is in accordance with the advice of Sir R. Rawlinson and Baldwin Latham. The last quoted authority says :—" The ventilation by means of shafts communicating with the crown of the sewer and terminating about the centre of the roadway has been carried out in London and many other places. In the opinion of the author this system of ventilating public sewers where ventilators are provided in sufficient number and furnished with materials for absorbing and destroying the escaping gases is decidedly the best system that can be adopted."

Sir R. Rawlinson's opinion.

187. I do not forget in advocating this system that Sir R. Rawlinson in remarks embodied in a memorandum of the Army Sanitary Commission said :— " The new sewers in Bombay will require to be permanently ventilated, not however at the surface within reach of surface floods, or the sewers would occasionally be injuriously swamped."

By this remark, I think, Sir R. Rawlinson referred only to such low-lying localities as Khetvádi formerly was, but as the surface of this district has been raised and as the greater portion of the town, certainly all that in which sewers have been laid, is above flood level, it does not apply to them.

Necessity for providing side ventilation chambers to manholes.

188. In my strong opinion the manholes, which are now almost hermetically sealed, should be furnished with side ventilating chambers and openings as recommended in the diagram attached to Sir R. Rawlinson's suggestions for main sewerage, for this design certainly affords means for the freest possible ventilation of sewers.

Charcoal ventilation.

189. In certain localities I have no hesitation in recommending the use of Baldwin Latham's spiral charcoal ventilator. I am aware that Sir R. Rawlinson does not now recommend the use of charcoal, but I have the evidence of my own senses to testify to its value in certain localities.

Dangerous condition of main sewers now.

190. It is not possible for me to exaggerate the risk to the public health from the unventilated or imperfectly ventilated condition of the main sewers as now constructed in Bombay. They are simply underground retorts for the manufacture of the most fatally injurious gas. To prove this I need only recall to recollection that several deaths have already occurred among men going down into them, and, in my opinion, not a day ought to be lost in remedying the want of ventilation in them.

Municipal Commissioner's reply.

191. In reply to my letter, the Municipal Commissioner accused me of having ignored the difference between unfinished work and the work which it is never intended to do at all. He stated that the ventilation of sewers has been fully accepted as a necessity and that various sums have been sanctioned for carrying it out; and he says ventilation by shafts is the system which is to be adopted in Bombay.

The objections to surface ventilation for general use are in his opinion—

1*st.*—The flooding of the sewers in heavy rain.

2*nd.*—The bitter complaints already raised from those parts of the city where the surface ventilation was tried.

My answer to first objection.

192. My answer to the first objection is that ventilators ought to have been constructed at the time the sewer was made, and that in my opinion ventilation by shafts erected on the side of the road and connected with the sewer by a pipe in which there are angles will not be efficient and will prove an expensive failure as they cannot act properly owing to the great amount of friction caused by the angles or bends in the connecting pipes.

This is well recognized in England, for example, in the annotated edition published in 1885 of the Model Bye-laws, page 122, it is stated: "It has been estimated that a single right angle in an air pipe impedes the passage of air, along it to the extent of some 50 per cent." Judging from the diagram of a ventilator in a sewer furnished me by the Executive Engineer to the Municipality, in which there are two acute angles, I have not the least hesitation in saying, that ventilation by means of shafts erected on the side of the road will be inoperative. The only position in which shafts can act properly is where they are erected directly over the crown of the sewer, but the cost alone of providing them in sufficient numbers must always be prohibitive. The Municipal Commissioner in recent plans forwarded to me for report proposes to erect shafts at great distances, in some instances exceeding 800 feet apart. No sewer can be properly ventilated by openings at such enormous distances. The proper distance between ventilators on the surface as laid down by Rawlinson, the Bombay Drainage Commission and others is 200 feet, and this is the greatest distance which ought to be allowed, especially in this country where the temperature is so much higher than in England. It will be quite possible to ventilate at the surface of the street and yet exclude rain in any quantity.

Answer to second objection.

193. As regards the second objection, my reply is that without supervision and the removal of silt from the manholes there must be a stench; but if sewers are, as they ought to be—

1*st*, properly flushed, and

2*nd*, if the silt is removed from the manholes,

3*rd*, and if they are sufficiently ventilated at the surface, there will be no smell issuing from them.

If there is, it is conclusive evidence either that there is need for an additional ventilator or that the cleansing establishment has not done its duty.

Further remarks by Municipal Commissioner

194. The Municipal Commissioner recognises the necessity for a systematic and periodical inspection of sewers and hopes to introduce it. He disagrees with me as to the necessity for side chamber ventilation or as to the distance between manholes being in all cases 200 feet apart, and in conclusion points out that in the sewered districts there has been a marked decrease of mortality of late years which, he thinks, prevents any argument being used that the new sewers are dangerous.

Recommendation that a Committee should be appointed to go into the question and that its report be sent to Army Sanitary Commission for opinion.

195. As there appears to be much difference of opinion regarding essential points between me and the municipal authorities, I would suggest that the whole question of the system to be adopted for the ventilation of the sewers in Bombay be first of all referred to a Committee to be appointed by Government and then that its report should be referred for the opinion of the Army Sanitary Commis-

sion in order that, in a matter of such paramount sanitary importance, there may be no mistake, for, if one is made, it will affect the lives of thousands in this City and bring great discredit on sanitary structural works in India.

European General Hospital.

196. I should also mention that during the year the plans for a new European General Hospital were drawn up. It may be well to recall to recollection that the present hospital occupies a site south of the old Fort George, now demolished. This site is bounded on the west by the G. I. P. Railway and on the east by the Frere Road, so that it occupies an area which in places is only a comparatively narrow strip of ground.

Recommendation of Committee of 1886 regarding site.

197. A Committee had in 1886 been appointed by Government to consider and report with reference to the proposed reconstruction of the hospital, which site or sites would be appropriate, &c., and, as will be seen from the following extract from Government Resolution, General Department, No. 3170, dated 6th September 1886, the Committee "finally decided *that the present site, as extended by the demolition of the existing fortifications of Fort St.* (sic) *George is the most suitable;*"

In which Government concurred.

and then the Resolution adds: "*In this opinion His Excellency the Governor in Council concurs.*" (The italics are mine.)

Designs made with great care and provided for an excellent hospital.

198. The plans were accordingly drawn up by the Executive Engineer who took great pains to carry out the recommendations made by Surgeon-General Moore, C.I.E., the Surgeon of the hospital and by myself, and they provided a most excellent hospital which would, for all time, have afforded proper and sufficient accommodation for the European poor of the city; but I very much regret to say that all the time, thought and labour spent in preparing them was utterly thrown away as Government, apparently forgetting that it had concurred with the Committee in their selection of a site and without having shown any indication of its having so completely changed its mind since the date of the first Resolution, was pleased to issue, on the occasion of the plans being submitted for its acceptance, the following Resolution in the Public Works Department, No. 426 C. W—1134, dated 21st July 1887:—

Designs useless as Government suddenly changes its mind regarding site.

"RESOLUTION.—The proposal to spread the hospital buildings over the whole of the old and new sites is extravagant. Government desire to utilize the present hospital for other ends, and the original intention was that the proceeds of the sale of the present site should help to pay for the new hospital. Government cannot admit that a hospital for 150 patients requires the enormous quantity of valuable ground comprised in both sites.

2. The project should be returned for revision with instructions that the European General Hospital must be confined to the site of Fort George, or say to a site bounded on the south by a line drawn east and west on the south side of the present Nursing Sisters' quarters, which building should not be removed if it can be avoided, as it has only recently been built and is suitable to the purpose. Another story can be added to the several buildings as designed, if necessary to economize space."

I venture to remonstrate.

On receipt of the above Resolution, I felt it to be my duty to submit a strong remonstrance in which I pointed out that the orders as contained in the above Resolution were diametrically opposed to the cardinal principles of hospital construction; especially as regards the order "that another story can be added to the several buildings as designed, if necessary, to economize space," as Miss Nightingale in her "Notes on Hospitals" had laid down as a cardinal axiom, which has been accepted by all sanitarians, that "there should not be more than two floors of wards in a hospital." The necessity for this will be at once apparent when it is remembered that a third floor entails a great waste of time and immense fatigue on the part of the medical staff, nurses, servants, &c., and it is a matter of observation that patients do not recover so well on upper floors, and that crowding of servants, &c., in a hospital always exerts a prejudicial effect on the sick. The Royal Commission for improving the sanitary condition of barracks and hospitals said in their report,—"Regimental hospitals may be constructed on one flat or on two flats, but they should *never be on flats more than two.*" As regards India, the Army Sanitary Commission in its Revised Suggestions say,—"each hospital block should consist *of two floors over an arched basement at least four feet high.*"

Site.

199. As regards the order "that the European General Hospital must be confined to the site of Fort George or to a site bounded on the south by a line drawn east and west on the south side of the present Nursing Sisters' Quarters," I pointed out that the above site covers an area of only 7¼ acres whereas the area occupied by the present hospital is about 10¼ acres, and that it will be simply impossible with any regard to sanitary requirements to place the new and larger hospital on the site ordered.

Combined area equals 17½ acres.

200. I also urged that although at first sight the combined area of the old and new sites (17½ acres) appeared large, yet that the site is so irregular in shape that it is impossible to arrange the buildings otherwise than in an extended form.

New Hospital and its subsidiary buildings require ample space.

201. The new hospital will not only consist of a hospital for 150 patients, but there are, beside the main buildings, detached hospitals for the treatment of cholera, small-pox, and delirium tremens patients, and all the subsidiary buildings, such as the residences of the Surgeon and Subordinate Medical Officers, the out-patients' room, the Nursing Sisters' quarters, laundry and quarters for the large staff of ward and menial servants. For all these buildings there must be ample space. They cannot with safety be huddled together.

Reasons why ample space is required.

202. I also asked Government to remember that on the east side, the hospital will to a certain extent be shut in; that none of the hospital buildings proper can be built close to the line of railway on account of the noise; that it will be impossible for sanitary reasons to allow the subsidiary buildings to be erected on the west or windward side of the hospital; and that it is absolutely necessary to provide an extended front *so as to allow the main buildings to face the prevailing wind.*

Hospitals in this country, on account of this last point, must necessarily occupy a much greater space than in England, and space must also be provided for a garden where convalescents can take air and exercise.

Danger of over-crowding.

203. It is my strongest conviction if these buildings are crowded together, as they must be if they are built on the site now ordered, that the future hospital will become unhealthy as there will be a great risk of epidemic disease breaking out in it, and I, therefore, earnestly hope that Government will reconsider the question, as liberality as regards space will be amply rewarded by the more speedy recovery of the sick.

Future expansion of Bombay should be taken into account.

204. I regard with extreme apprehension any curtailment of the site, and I am sure that the erection of buildings unconnected with the hospital on the south will exert a most injurious effect on the patients in it, and whilst the site is not too large for present requirements, it certainly will not be so when, as in all human probability will be the case in the not distant future, the City of Bombay has attained a far larger size than it is at present and when consequently additional hospital accommodation will be required which cannot possibly be given on this site if a portion of it is now sold and devoted to other purposes.

Remonstrance also made by Surgeon-General Moore, C.I.E.

205. I do not know how the matter has been decided,* but I earnestly hope for the good of the City that the remonstrance, which not only I, but which, I believe, Surgeon-General Moore also, submitted to Government, may lead to a wiser and more liberal course being adopted

* Since these paragraphs were in type I have received Government Resolution, Public Works Department, No. 232 C. W.—734, dated 23rd April 1888, in which the area, named in Resolution No. 426 C. W.—1154 quoted above, has been considerably increased. The total approximate area, now ordered to be reserved for the European General Hospital, amounts, I am informed by the Executive Engineer, to upwards of 14 acres. The remaining portion (about 3 acres) on the south of the original site will, it is presumed, now be sold, and lofty Native houses, similar to those

as regards the area to be allotted to the new General Hospital and that Government will revert to its original Resolution.

Wants of sanitation among rural and town communities.

206. Perhaps I cannot close my Indian career in a more befitting manner than by leaving on record the results of my own experience as regards the wants of sanitation (1) in village communities and rural districts, (2) in smaller municipalities and small towns, and by explaining how, in my opinion, they could be best met and what sort of legislation is required to meet them.

Number of villages in the Presidency of Bombay.

207. As regards village communities and rural districts, it is of primary importance to show the number of units which have to be dealt with, and there are in the Presidency of Bombay—

7,067	villages containing a population	under 200	inhabitants,
8,534	" "	between 200 and 500	inhabitants,
8,941	" "	above 500	inhabitants,

so that the total villages amount to 24,542.

Villages with population under 100.

208. The first group can be sub-divided as regards the Presidency Proper into 2 classes: 1st those containing a population of under 100, of which there are 2,518, and 2nd those containing a population of over 100 but under 200 inhabitants, of which there are 3,564 in the Presidency Proper. These details regarding Sind are not available. The villages with a population under 100 are thus distributed :—

In Gujárát ...	... 292	In the Deccan ...	... 1,140
In the Konkan	... 457	In the Western Karnátic ...	629

In Khándesh alone there are 577 such villages, which are chiefly inhabited by Bhils or other depressed tribes who live in out-of-the-way places and eke out a scanty subsistence by cultivating small patches of ground or by hunting and killing wild beasts, deer, &c. In the Kánara jungles and along the Western Gháts these villages are tenanted by denizens of the forests who burn charcoal, cut firewood, &c., but who are always the poorest of the poor and not far removed in intelligence from the brute creation. The villages consist of huts made of reeds and covered with wattle and daub. The roofs are thatched usually with grass or leaves. The cow and the goat, if he is lucky enough to possess either, occupy the same room as the owner, and the village site is indescribably filthy. In some places 5 yards would be a long way for the residents to go for the purposes of nature. Their water-supply is generally drawn from a brook or from a spring. If there is a well, its surroundings are sodden with filth. Their food is of the filthiest description as they will eat carrion, though I once met a Bhil who pointed with triumph to a neighbour and said, "any way I am not so low as he, for he will eat a dead crow and I wont." For such

---

already erected on the opposite frontages of the street, will, to a certainty, be built on it, and the latrines attached to them will necessarily be on the side nearest to the hospital. In my strongest opinion this curtailment of the site, originally sanctioned by Government, will act prejudicially on the health and comfort of the patients in the new hospital. No one but those who have experienced it can form any idea of the noise which accompanies Native entertainments, and there can be no question from a sanitary point of view that it is a dangerous experiment, especially when it is remembered that owing to this curtailment Government has been pleased to order that the "hospital block may have two upper floors." When this order is carried out, an irreparable injury will, in my opinion, have been inflicted on the European sick of this city for all time. As its sanitary adviser I am bound to tell Government that any hospital constructed in such direct opposition to well established sanitary principles *must* be unhealthy. I regret to see that a policy of expediency has been allowed to carry the day against what is sanitarily speaking right. And I cannot help thinking that it would have been a wiser measure if Government had been pleased to attach greater weight to the consideration of the wants which will certainly arise in the future, when, it is not hard to foresee, that the Government of that day will be greatly hampered and will experience very great difficulty and have to incur a very large expenditure in providing additional accommodation for the European sick which the future expansion of the City will assuredly render necessary. Is the money to be realized by the sale of these 3 acres to be weighed for an instant against the well being of our sick fellow countrymen and women? And does not this case bring strongly to light the necessity for Government having always at its command the services of a trained Sanitary Engineer who would at once have rejected any such insanitary proposal as to place two upper floors in a *hospital?*

villages any attempt at refined sanitation would end in failure; but still, in my opinion, provision ought to be made for the protection of the sources of water-supply and the allotment of places to which the inhabitants should alone be allowed to visit for natural purposes and power should be given to change the village site if epidemic disease breaks out. This may at first sight appear hard and unnecessary, but it is absolutely essential from a sanitary point of view, and it is no hardship to the villagers to untie their houses and remove them to a fresh site. I recommended this action to the Panchâyat of the village under the temple at Ganesh Khind in 1877 and they luckily took my advice and the whole village was removed in the course of about 3 or 4 hours.

Villages with a population between 100 and 200.

209. The next group of villages contains between 100 and 200 inhabitants and amounts, as I have said, to 3,564, which are thus distributed:—

In Gujarát	... 399	In the Deccan	... 1,543
In the Konkan	... 780	In the Western Karnátic	842

These villages are also chiefly met with in the Ghát districts and in Khándesh, and are inhabited for the most part by much the same class mentioned in the last paragraph. In most there will be found a resident bunia, a blacksmith, a carpenter, and a barber, but if not, these artizans come from the nearest large village if sent for, and the money-lender will attend to look after his debts, and altogether there are in many of these villages more signs of civilized life than in those of the last group, but still the inhabitants are for the most part miserably poor and have much difficulty in bad seasons in keeping body and soul together. They are but little advanced in the social scale, and I fear but little more in the way of sanitation could be done than to insist on the measures I have recommended for the first group. The people generally in this group of villages obtain their water-supply from wells and tanks and are agriculturists, as the villages are situated for the most part in a more open part of the country.

Sind.

In Sind there are 985 villages, each containing a population under 200 inhabitants.

Villages with population under 500.

210. The next group consists of villages containing above 200 and up to 500 inhabitants, of which there are 8,534 in the Presidency, which are distributed as follows:—

In Gujarát	... 1,068	In the Deccan	... 3,223
In the Konkan	... 1,772	In the Western Karnátic	1,623
In Sind	... 848		

Villages with population above 500.

211. These do not differ, except in size, from the larger villages, of which there are 8,996 in the Presidency, which are thus distributed:—

In Gujarát	... 1,546	In the Deccan	2,984
In the Konkan	... 1,364	In the Western Karnátic	... 1,518
In Sind	... 1,584		

These figures, however, include the 164 mofussil villages with a population of more than 5,000 inhabitants, which in the census returns are classed as towns. It will be therefore understood that many of the large villages might be more appropriately designated towns. In all of them strict conservancy is absolutely necessary.

The village system under native rule.

212. In both the smaller and larger villages the head authority is the Pátel who in old times was assisted by an establishment of recognized village officers which in large villages, not counting the Kulkarni (village accountant), consisted of as many as 24 persons, who followed the various trades or professions or were artizans necessary for the well-being of the village and who as public servants possessed certain rights.

Has been broken up under English rule.

213. Unfortunately, for reasons it is not necessary in this report to dilate upon, this very perfect village organization has been gradually broken up or allowed to fall into decay instead of being fostered as one of the best legacies of native

rule; for no system could have been more suitable or better adapted to native habits and customs, and though some of the village officers still retain their duties, they have to a great extent lost their ancient rights to recompense for service rendered. Each large village has still its bard and astrologer, as well as its carpenter, blacksmith, goldsmith, tailor, leather-seller, washerman, potter, barber, oil-seller, &c., whose services are indispensable and who are in a position to demand and obtain their rights, but the case is far different with the despised Mahárs and Mángs. These poor people have never been allowed to live inside the village but occupy a few huts on its outskirts and on this account they are designated Parvaris, *i. e.* those who live outside the gate. They were the hereditary village menials and watchmen and they were bound to assist travellers in the service of Government to whom they acted as guides, or masálchis (torch-bearers), besides being the recognised messengers of the Pátel. Under the old organization they received from each houseowner for scavenging the village so many handsfull of grain at the time of each crop. This good, old and sensible practice has, I regret to say, under the refinement of English administration, been permitted gradually to fall into disuse, and the consequence is that the village surface no longer receives the partial cleansing it used to do under native rule.

The Mahárs, the only scavengers.

214. No greater mistake was ever made. These Mahárs are the *only* persons who will perform scavengers' work, and the unjust treatment they have received in the villages is leading them to follow other occupations which in these days of progress they are enabled to do, and they are gradually leaving their old abodes to seek employment in towns, or to obtain work on the railways, or other public works. No time ought to be lost in establishing their hâk by law and in enabling them to recover their just dues by summary process.

A visit of inspection to a large Deccan village.

215. Perhaps the best way to convey a correct idea of the insanitary conditions which exist in our Indian villages will be to describe a visit of inspection to a large village in the Deccan containing between 2,000 to 3,000 inhabitants. So I will imagine that I left my tents at my last halting place at about 3 A.M., and, as the sun appears above the horizon, am approaching the village whose site I have recognised from a long distance from the numerous trees in its vicinity. Ever since the dawn I have felt invigorated by the fresh air of the open country, and, as the light grew strong, have noticed with pleasure the favourable condition of the crops of wheat, jowári, gram, flax, túr and kardi, which are seen, as far as the eye can reach, on either side of the country road over the black cotton soil which, though worn in places into ruts, is tolerably good, as it is hard in this, the cold season of the year, and as I drive along, I hear the call of the partridge and listen to the sweet song of the lark as she mounts higher and higher into the clear sky.

Gypsies.

216. I have just passed some ferocious-looking dogs and several pack bullocks laden with sacks of grain and three or four donkeys carrying the black tents, cocks and hens, and other worldly possessions (including 2 old women) of a tribe of Lemannies, who inform me they are on their way to Pandharpur and Bijápur. I cannot help being struck with the strapping forms and handsome faces of the men and with the lithe, active figures of the young women, who are remarkable for their good looks and for their petticoats gay with the brightest red, yellow and blue stripes, whilst the curious and quaint designs of their silver ornaments with which their foreheads, necks, arms and ankles are profusely bedecked, attract instant attention.

The Pátel.

217. At about a mile from the village I am met by a native on horseback. I notice that he wears the large Marátha turban and has his ears and mouth carefully protected by a cloth tied over the puggree. He is mounted on a piebald pony which has wall-eyes, like poached eggs, and whose white tail has been dyed a brilliant pink color. He is seated on a Marátha saddle over which is spread a quilted cloth made of patch-work of bright colors in which yellow and blue predominate. On his feet

are the large wide-toed red Marátha shoes or rather slippers, and as his stirrups are very short, his knees are very high up. As I approach, he pulls up the tattoo with the sharp Marátha bit attached to a rope bridle, and as the poor brute feels the pressure, it tries to rear, but is stopped by the party-coloured rope which acts as a martingale. As my tonga comes up, this gentleman dismounts, pulls the cloth from off his puggree, squirts from his mouth a copious stream of saliva, tinged red with the betelnut and lime which he has been chewing, and making a low salám informs me that he is the Pátel of the village and has come thus far to meet and escort me to it.

Place of cremation.

218. A little further on I reach a nála with a small stream still running in one part of its rocky bed and I notice the remains of what had evidently been funeral pyres, and this the Pátel informs me is one of the places where the bodies of Hindus of caste from his village are burnt. After crossing the nála the road passes through fields in which are growing luxuriant crops of sugarcane with a few castor-oil plants lining the hedge and plots of lucerne grass, and I hear the not unmusical noise made by the water, which has been drawn up by a moat from a well, as it falls into the channels by which it is distributed over the fields, and which are led under the road by a rude masonry syphon.

Temple.

219. Nearer the village I pass a small grove of trees, in which there are some stones carved in the shape of the Pindi and Shálunka, and in front of them, with his face towards them, the bull (Nundi) sacred to Mahadeo; and on the opposite side of the road, is a small temple sacred to Ganapati. A garland of withered flowers is stretched across the lintel of the door through which I see the idol hideous with red lead and stained with oil and the Pujári (attendant priest) in the act of ringing a series of bells which are suspended from the roof by brass chains whilst he mutters his mantras.

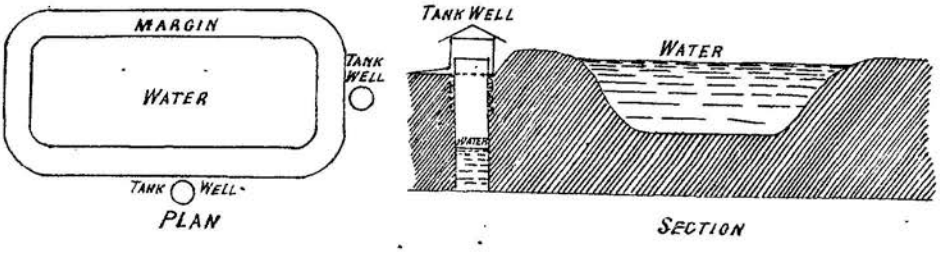
The village tank.

220. I then meet a number of women in their bright coloured sáris who are carrying on their heads brass and copper water-pots and who are going to the tank by the side of which the road passes, and here I notice clouds of dust caused by a long line of bullock-carts which have just arrived from the Kusba and the creaking sounds produced by the friction of their unoiled axles forcibly recall to my recollection the *stridentia plaustra* of my schoolboy days, but I regret to see that the dust is being carried by the light wind blowing from the east into the tank which is approached by steps down which the women descend into the water where they first wash out their water-pots, then place them one by one on the steps, and fill each in succession after having first carefully covered its mouth with a dirty cloth in order to strain the water from the impurities suspended in it, and especially to prevent insects passing into it. Close by are men and women standing in the water, some of whom are rinsing out their mouths, and spitting the volume of water back into the tank, whilst others are bathing, and not far off are several persons washing their clothes after they have been immersed in the tank by beating them on stones placed on the bank. A little further on buffaloes, cows, &c., have been brought down to water, and it is sad to observe that these animals almost invariably micturate whilst they are drinking. On the bank I notice several graves, some recent, where, I am informed, some of the Mussalmán inhabitants bury their dead, and under the tope of mango trees on the far side of the tank is a Hindu shrine near which are tombs which are said to have been erected long ago in honour of the women who performed satti, but there are others also in which I am told some Sanyásis have been recently buried in a sitting posture. As I stand watching the tank a flock of green parrots pass over in rapid flight, and colonies of crows have established their nests in the nim and bábul trees along its bank.

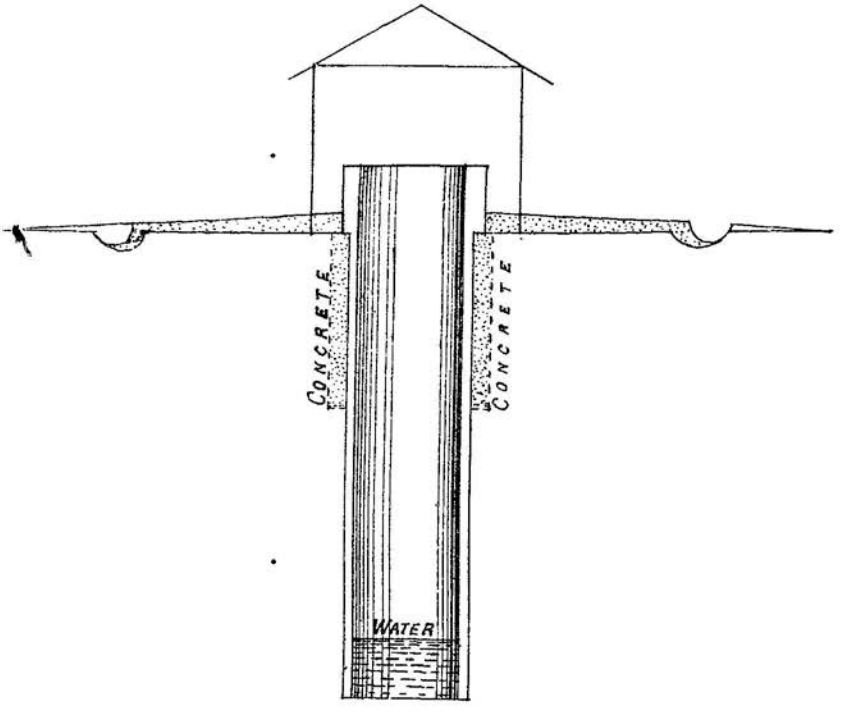
Improvements required.

221. I pointed out to the Pátel how wrong the above conditions were and advised him to apply to the Collector to move the Local Board to sink two wells at a distance of about

10 to 15 feet from the tank to ensure that amount of filtration according to the following diagram published by the Army Sanitary Commission :—



"The well is dug and built up in the usual way, but when it comes within 8 to 10 feet of the surface, the tube must be coated outside with puddle or concrete to cut off the upper portion of the water. The tube of the well should be carried 2 feet above the ground-level and covered with a roof. The ground round the well should be coated with concrete or paved and sloped away from the well to open channels as shewn in the diagram below." I told him people should not be allowed to bathe or wash clothes in the tank, nor should cattle be allowed to enter the water. A separate place should be told off for washing and troughs should be provided for watering the cattle :—



Funeral procession.

222. As I leave the tank, I meet a procession of men who are naked from the waist up and whose long hair is hanging down. The one in front is carrying by its string a net in which is placed an earthen vessel containing a burning cowdung cake and behind him on a bier made of two bamboos with cross bars is a body dressed in white clothes and covered with garlands whose face, streaked with red ochre, presents a ghastly appearance. It is borne on the shoulders of four men, whilst those who follow utter a mournful invocation to their deity. It is the body of a Hindu who has died during the night which is thus being carried by his relatives, faint with fasting and in great sorrow, to be burnt on the bed of the nála I had passed on my way to the village.

Village dogs.

223. On approaching the immediate vicinity of the village, numerous dogs, some of which had been warming themselves by lying curled up on the ashes of the fires, which the cartmen, who arrived too late to get into it, had kept alight during the night, rushed out on seeing me, barking furiously the while, as only Indian village pariah dogs can bark, but my friend, the Pátel, after grossly abusing their nearest female relations, throws a stone at them and they slink away growling and showing their teeth.

Village tree.

224. Just in front of the principal gate opposite to which I have arrived is an open space in the centre of which is a huge pipal tree. Round the trunk a raised stone seat was in years gone by constructed, but some of the stones have been forced up by the growth of the tree and unless it is repaired (which I may safely predict it will not be) it will, ere very long, fall to pieces. Here the Kulkarni, the Táluka Vaccinator, and several of the more respectable inhabitants, including the School-master, and principal Bania and Sávkár, are awaiting my arrival, the news of which was brought to them yesterday by the Táluka Vaccinator whom I had sent ahead for that purpose.

Registration of births and deaths.

225. After the exchange of saláms, I notice a certain anxious expression on their countenances, and I find they are not quite sure of the object of my visit which by some extraordinary power of imagination they have connected with a desire on the part of the Government to increase taxation. I soon, however, quiet their fears and explain that I only wish to see the sanitary condition of the village, and they commence to discuss among themselves what can be my motive in coming for such a purpose. So I turn to the Kulkarni who, I see, has brought his register of births and deaths, and I enquire how many of each have been recorded during the present year as compared with former years, and whether there has been any epidemic of cholera or small-pox during the previous 12 months. I find that the number of births which have been recorded during the years equals only an annual ratio of 22 per 1,000 of the population enumerated at the last census though the birth-rate of the district is certainly not under 40 and more probably 45 per 1,000, whilst the registered deaths amount to 30 per 1,000. On cross-examining the Kulkarni I find he has to attend five or six other villages in the neighbourhood, and that whilst he is absent from the village no one writes down the births or deaths, but the Pátel who cannot either read or write trusts to his memory to tell him on his return what births and deaths have taken place during his absence. This practice leads to great inaccuracy. On further enquiry I find that no one comes forward to report these occurrences to the Kulkarni or Pátel voluntarily, but they generally hear of them when the villagers collect at the chávdi in the evening. I also find that a man died last week at the dharmshála and the person in charge did not report the death but got some Mahárs to carry away and bury the body. It is, therefore, evident that many deaths have escaped registration and that the real death-rate is much higher. The recorded rate of infant mortality, I find, is very high, amounting to no less than 360 per 1,000, and though there was no epidemic of small-pox or cholera, the death-rate from fevers and bowel-complaints is very high. This fact at once leads me to suspect that I shall find the village site very damp and the drinking water-supply much contaminated. In the meantime I tell the Táluka Vaccinator to collect the children he has recently vaccinated and to have them ready at the chávdi when

I come into the village, so that by calling their names out of his register I may verify the accuracy of his returns.

Outskirts of village.

226. Before proceeding into the village I propose to walk round it so that I may know precisely the conditions outside, which are likely to affect the public health, and accompanied by the Pátel and his friends I proceed along a path at the side of which is a small nála running outside the village wall, or rather where in the old times the village wall used to be, for it has been pulled down in many places and I find portions of the ground outside have been enclosed with thick bramble hedges.

Prickly-pear place of natural resort.

227. The banks of the nála are covered with clumps of prickly-pear which grown in great luxuriance and attains a great height, as many of them are at least 15 feet high. It thus obstructs the passage of air into the village, and I very quickly find that this is one of the places used for natural purposes by the inhabitants. A close and very fetid odour clings to it, and on all sides women and children are seen trying to hide themselves, whilst further on men are squatting without any attempt at privacy.

The atmosphere reeks with nightsoil and the fetid smell attracts not only pigs but cattle who devour the fresh excrement, and so greedy are they that both men and women have provided themselves with sticks to keep off the assaults of these creatures which have developed so depraved an appetite.

Recommendations regarding provision of proper places.

228. I pointed out to the Pátel that this kind of thing ought not to be allowed so close to the village and on the windward side, and tell him he ought to select sites to leeward and not nearer than 200 yards to it, to which only the people should be allowed to resort. I pass on as rapidly as I can, and then come across several unwholesome excavations which have been made for the purpose of obtaining earth for building the mud walls of houses inside the village, and close by there is a vein of yellow clay which the potters dig out and carry away, but the brick-kilns are here and are kept alight by burning cutchra collected in the village. Some of these excavations have been filled with water by the recent rain and are gradually drying up, leaving a large surface of mud exposed. In one in which there is much water, is a herd of buffaloes which lie on the bottom and keep only the tips of their noses out to breathe. They exhibit a striking picture of calm repose, and are evidently hugely enjoying their cool bath, from which when they are disturbed they come out with their black hairless sides glistening in the morning sun. I tell the Pátel, these excavations ought to be either drained or filled in, but as he truly says, what can I do ? I have no funds to pay for the labor.

Unwholesome excavations.

Brick-kilns.

The goatherd.

229. A little further on is a road leading to another gate of the village and on one side of this is a well, but before we can approach it we must wait until a flock of goats, some 300 in number, have passed. They are being led by and are in charge of an old man, who himself presents a very strong resemblance to a goat, and he is taking them to the jungle outside the village to graze during the day and will bring them back at sunset when they will return each of its own accord to the house of its owner. As soon as they have all passed we cross the road to the well which we find is open and which I regret to see, is approached by steps. By its side is an ancient fig-tree which, is tenanted by innumerable doves, which have constructed nests in holes on the upper part of the tube of the well. They keep up an incessant cooing and their droppings fall into the water, which is also fouled by the leaves of the tree above, and on its surface I notice pieces of stick, kirby, flowers, feathers, &c. The dust from the road finds ready access into it and animals also walk down the steps leaving their droppings on them. I explained to my audience the sanitary objections to such a well and told them that the same action, I had already recommended regarding the provision of new wells at the tank, was here necessary. I also explained to them the risk they run of contracting guinea-worm by going down into the water and suggested that the steps should be

Village well.

built up, the parapet raised and a roof put over the well, which should be thoroughly cleaned out, but they demurred to the roof. They said it was a popular belief in India that all drinking water should be exposed to the sunlight. In reply I said yes, that is so, but like many popular beliefs it is based on error. Nature is especially careful to keep the drinking water-supply in every part of the world shut out from sun, light and air, because the light of the sun and exposure to the air favour the development of vegetable and insect life; and I reminded them that the Mahomedans in old times, as evinced by the wells recently discovered at Bijápur, knew better as they were especially careful to dome them over, leaving only a very small hole through which the lota was let down; and I told them when these wells, which had been in darkness for at least 200 years, were opened we found that there was no vegetation, no insect life, and the water was deliciously cool and sparkling instead of being hot and vapid to taste. An objection was raised to closing the steps by the School-master who said it was much easier for the women to go down steps into the water and fill their water-pots than to draw it by means of a string attached to a lota. To him I replied you can put up wheels, which should be fitted with iron chains and have attached to them iron vessels, as these are so much cleaner than the dirty rope attached to a lota. This was agreed to and they promised to ask the Assistant Collector at his next visit to help them to procure funds.

Tanners.

230. We then continued our rounds and passed a collection of huts from which a terrible smell was emanating. On going up to them we found they were inhabited by Dhores and Sultankhores, the tanners of the village. Heaps of offensive rotting tan bark were lying outside the huts from which there was a filthy ooze in which the children who were entirely naked were playing and making mud-cakes. There was no attempt at any drainage and the vats in which the skins were placed stank so horribly that most of my audience declined to enter. A Sultankhore was stirring up the mixture so as to expose the entire hide to its action. This collection of huts is on the east of the village and some of the villagers said during the cold weather they suffer horribly from the smell as these huts, although technically outside the village, are close to it. The Dhores have made a roadway into the village by pulling down the old wall. I told the Pátel that such offensive trades ought not to be allowed so close to the village, that there should be a distance of not less than 400 yards between them and the village and that they ought only to be allowed on the south of it.

Mahárváda.

231. A little further off but standing separately by themselves is another collection of huts covered with jhowli leaves. This is the Mahárváda and the ground in its vicinity is indescribably filthy. We saw children engaged in easing themselves close to the houses and it was evident that adults in the early morning had performed the offices of nature within a distance of 5 or 6 yards of their huts, whilst by the side of each hut is a stone on which the inhabitants stand to bathe themselves and the water so used sinks below the foundation of the hut. There is a well in the centre of these huts over which the skull of a bullock is fixed which would at once show a Hindu wayfarer that this water was unclean for him. The wastage water soaks into the ground round the well and eventually finds its way into it. We notice a sow with a litter of pigs wallowing in a filthy piece of ground close to a hut where the remains of a caste dinner have been deposited, and near it a sheep has just been slaughtered whose head is lying on the ground whilst the skinned carcass is hanging from a rope stretched between two adjacent trees and the blood is dropping from it on to the ground below. I begged the Pátel to stop such practices and to have the filthy ground covered over with fresh earth, and not to allow pigs to wander about but to insist on their being kept in proper sties or else destroyed. This action he said he could take as their owners were only low-caste people. I then told him to make the head Mahár muster all the children in the hamlet. They are soon drawn up in line or their mothers attend with their children sitting on their hips, whilst I examine their arms to see if they bear the marks of vaccination, and I am pleased to see that the Hindu Vaccinator has not allowed his prejudice to stand in the way of performing his duty, for I find there are only 3 or 4 infants, who have been born since his last visit, who have not been vaccinated.

232. A little further on we pass another collection of huts occupied by Mángs, who live quite distinct from the Mahárs, but whose habitations were equally filthy. They and the Mahárs affect to despise each other and each one thinks the other too low a caste to associate with.

Mángváda.

233. On leaving the Mángváda I notice a donkey lying down and on going up to it find that it is dying. The crows have already begun to attack it and are pecking at the flesh and bowel. I tell the Pátel he ought to have the poor brute put out of its pain, but this he declines to do as he says his religion will not allow him to take life. So I arrange with him to have some water and grass placed within its reach and to keep a boy to drive away the crows so that it may at all events die in peace.

Dying animals.

234. Between the Mángváda and the village is a grove of mango trees, in one corner of which the low caste people bury their dead, whilst on the opposite side is the principal Mahomedan burial ground.

Low caste and Mahomedan burial grounds.

235. We now reach the gate on the opposite side of the village, and as we approach it I notice a line of five blind men, each one having hold of the shoulder of the man in front of him, except the first, who is being led by a boy, and as soon as they get outside the gate they sit down in a row and beat their chests and stomachs with their open palms calling all the while "blind, blind"; but who is this poor creature on the other side of the road who sits by himself? Before going up to him his scarred and deformed physiognomy alone, without looking at his hands and feet from which he has lost both toes and fingers, proclaims him to be a leper. He calls out "leper, leper," and pushes a small earthen vessel in front of him in which the passers by drop a few pice, and as he is doing this a dog comes up and licks his foot. I ask the Pátel if there are many lepers in the village and he says there are three or four families who are affected with this disease; that Government puts no restriction on their wandering about and coming into contact with the healthy and that they marry and beget children and perpetuate the disease.

Blind men.
Lepers.

236. The precints of the village on this side are also found to be used as a huge latrine as the people swarm out to them in the early morning for the purpose of easing themselves and we see them now returning with their lotás in their hands. The odours which assail one are perfectly indescribable and make me feel quite sick. There is on this side also an unwholesome swamp caused by the giving way of the bank of the river which flows past this side of the village. At present the river bed is dry and we walk down into it and find the people have dug jheels in the sand from which women are constantly passing to and from the village. I notice that the contents of cesspools attached to adjacent houses along the raised bank are percolating into the bed. And higher up are graves in the sandy bed where I am informed is the place where during the fine season the Lingáyats inter their dead, whilst during the rains they bury on the bank. There is a corpse now being burnt above stream and persons are washing their clothes at holes dug in the sand above the place they obtain their water-supply and cattle are seen wandering along the bed eating up the human excrement which has been deposited on it. Higher up melons are growing in the bed which, I am informed, was manured, as soon as it became dry, with nightsoil. I tell the Pátel he ought to prevent any such fouling of the river bed and that he should stop all cultivation above the point where the people draw their water. This part should be defined by ramps of sand on which should be a bramble hedge to keep out cattle. Washing of clothes, &c., should only be allowed below the place where the drinking water is drawn. At some distance from the bank is a temple in which there are statues of Vithoba with his arms akimbo, and of Rukhmini his wife, which is always submerged during the monsoon, and by it is stranded a big boat the prow of which has been carved into the resemblance of the head and neck of a

Place of natural resort, swamp, &c.

Various nuisances in river bed up stream.

Lingáyat burial ground.

horse which is painted red and which is used as a ferry boat during such times as the river is in flood.

Interior of village.

237. It is time, however, to get inside the village and I hasten to the gate from which we first started. This is very lofty, the doors consist of planks of teakwood which on the lower part are furnished with iron bosses, whilst from the upper half long iron spikes project which were intended to prevent them being rammed open by elephants. The Pátel tells me that there is a tradition that the famous Marátha hero Shiváji accompanied by his ill-fated Lieutenant Tánnáji Maloosray, on one occasion visited the village and rode through the gate on elephants. He says the doors are the original ones and they certainly show evidences of great age. We now enter the village and the first thing that strikes me is the close, faint smell inside as there is an almost complete stagnation of air. The principal thoroughfare—for it cannot properly be called a street—is unmade and there are no road-side gutters, but down the centre is a channel by which the storm water escapes during the rains. It is about 12 feet wide, but its course is most irregular, for after advancing some little distance along it I observe that a Hindu temple has been built right in the middle, in front of which is one of the huge cars on which the god is carried in triumph at the Divali. By its side are two Gosains whose faces have been coloured white with ashes. They are entirely naked except for a scanty languti, and their long rusty-looking hair has been twisted into plaits and coiled over their heads, and each one carries in his hands a dried gourd and a twisted stick cut from a creeper.

Gosains.

Description of houses.

238. The better class of houses are two-storied buildings which have the usual half-tiled roofs, but by far the greater number of houses consist of only a ground floor and are covered with the flat, coarse, imperfectly burnt Marátha tile which admits much rain through the interstices left by the badly-fitting sides. I am struck with the many signs of dampness on the walls of the houses and invariably along the ground level and extending up for at least 3 feet though in many cases much higher are the signs of "loona"—the eating away of the mortar and bricks—which in my opinion is due to the nitrification of the organic matter in the soil. It forcibly reminds me of "the fretting leprosy" of the house spoken of in Leviticus.

An interior of better sort of house.

239. I at length arrive at a cross street, and the corner house belongs, I am informed, to the principal Sávkár. This consists of a ground floor and of two stories, the dead wall towards the thoroughfare is limewashed and on the white background the native artist, a Chitari, has pourtrayed with considerable skill, though his perspective is at fault, the mythological fight of Rama (coloured red), assisted by Hanumán (coloured blue), against a terrible looking black giant, Rávana, whilst the monkey troops are seen coming fast to the rescue of the imprisoned Sita. There is a flight of four steps on either side leading to a landing in front of the doorway up which, with the owner's permission, we ascend into the house, but on one side of it I notice what is no doubt considered a faithful representation of a British Infantry soldier and on the other one of Sir Frank Souter's Bombay policeman with his yellow puggree and with a dark lantern and staff in hand, stern and grim, as if he were looking for the Chief Presidency Magistrate. The stone before the doorway is covered with designs in white chalk which the good lady of the house got up before daylight to impress with a stamp as a sort of "Salve" or as a charm, to ward off evil spirits. On entering we pass under the floor of the rooms above and find ourselves in an open quadrangular paved chouk or space open to the sky. The plinth, which is of cut trap stone, is about 3 feet high and round it at intervals are inserted brass rings. The ground floor on the four sides is entirely open to the chouk and the upper floors are supported by teak pillars which are handsomely carved along the top. The outer walls of the house have no openings into the external air. On the ground floor are on one side tethered 4 buffaloes, 2 cows and a tattoo. All the droppings of these animals fall on to the earthern floor and the wall is encrusted with dirt, whilst spiders have built their webs between the rafters of the floor above. Near the tattoo the Hindu Ghorávála's wife is sitting on the floor and engaged in grinding

gram. She stops singing as we enter and draws her sári over her face. The pavement of the chouk is kept constantly wet by the water spilt from a well which is at the side opposite the doorway and behind which is the kitchen. A stone gutter has been made under the doorway through which the water runs out and is discharged into the street.

Back-yard.

240. The servants sleep on the ground floor near the doorway, on one side of which there is a stack of dry cowdung cakes, and by the side of the kitchen is a passage through which we pass into a back-yard, which is about 60 feet square and is full of all kinds of filth. Here are the leaves which sown together formed the plates for yesterday's dinner. There are the remains of rice and curry which some fowls are busily engaged in eating. Here too the manure and litter used by the cattle is stored. There is a large collection of it, but, I am informed, it will be shortly taken to the owner's field. Close to it are two stones on which the members of the family stand whilst they are performing their ablutions; the water so spilt forms an offensive pool over which a brood of mosquitoes is hovering. The surface of part of the yard is covered with cowdung cakes which are also plastered on the wall round the enclosure, and in one corner is a masonry privy below which there is a tattered basket which, though it is supposed to retain all the nightsoil, allows the ablution water, urine, &c., to soak into the soil. There is only one family of bhungies attached to the village and the owner tells me he pays 12 annas a month to have it cleaned, but the bhungy only comes every 2nd or 3rd day. The smell from it is something sickening.

Privy.

Covered cesspool.

241. I noticed that the kitchen water is conveyed into a covered cesspool sunk into the ground by a pipe made of tiles covered over with chunam. This pipe is carried up the sides of the house and on the first and second stories is connected with the nánies which are situated in one corner of the sleeping apartments and which are used for bathing and as urinals.

Recommendations.

242. I tell the owner that all these conditions are extremely dangerous to the health of the family. I beg of him at once to cut off that part of the pipe which leads into the cesspool, as all the gas in it must be drawn into the warmer air of the inhabited rooms. The cesspool, if there must be a cesspool, should be dug at a distance from the house, and it should be cemented inside. It ought to be open, but if closed, must have a ventilating pipe taken from the crown of the cover which should run up the side of the house and terminate at least six feet above the roof. I also tell him he ought at once to alter his privy in which there ought to be no lime used, because when urine falls upon lime offensive ammoniacal salts are formed which cannot be kept clean. I advise him to apply to the Executive Engineer of the Local Funds for a plan of the native privy sanctioned by Government. I also tell him he ought not to have cattle stabled in the house or keep their dung on the premises, but he says he cannot make any other arrangements.

Upper rooms.

243. I then go upstairs and find one room is kept as a state apartment and only used on festive occasions. The walls are covered with mirrors and a glass chandelier has been brought from Poona, which is the envy and admiration of the neighbourhood. The ladies of the household occupy rooms on one side of the house and the owner transacts his business in the corresponding room on the other side. The topmost story is chiefly used as apartments for the female servants and as a store for provisions, and pieces of old furniture, &c.

Infant mortality.

244. Before leaving I thank the owner for his kindness in having shown me over his premises, and I enquire how many children he has and he tells me that out of a family of 6 children who have been born he has reared only 2, the remainder having died in their infancy

Ruined house.

245. On passing out into the road my attention is attracted by the site of a house, which has fallen down. The wood-work has been taken away, but the débris, consisting of bricks,

mud, broken tiles, &c., has not been removed. The datura plant is growing all over the surface, and I regret to notice that there is plenty of evidence to show that this place is used as a common latrine. I tell the Pátel that the owner ought to be compelled to remove the debris, but he says he has not the power to enforce such an order; but I point out that if he cannot be compelled to remove it, he ought, at all events, to enclose it by a high wall so as to prevent passers by, and even the occupants of the adjoining houses, using it as a latrine. The Pátel informs me that the owner means to rebuild the house on the present raised level. If this is done, the plinth will be much higher than the houses on either side, and all the water spilt on its surface or used for ablution purposes will infallibly keep the walls and ground floors of the adjacent houses very damp.

Nuisances in streets.

246. A little further along the road I observe an aged Hindu woman walking round and round a square four-horned earthen altar, about three feet high, lime-washed white but having red and blue lines on each side in which the sacred Tulsi plant (Ocymum sanctum, the purple-stalked Basil) is growing, and as she does so, she reverently places her extended hands to her forehead and invokes the blessings of Heaven on the household. At the side are three steps leading to the threshold of the house, on which there is a Hindu woman carefully holding her little girl of about two years of age over the steps so that it may defœcate into the road. I tell the Pátel he ought not to allow this objectionable practice, and he ought to stop people of all ages squatting by the side of the road, as I see the old blear-eyed grandfather of the little child is now doing just opposite the house. The sides of the road are quite wet with urine and this makes a passage through the village so disagreeable a duty.

An interior of inferior sort of house.

247. I then ask the poor woman, who is very frightened at having been pointed at by a Sáhib, to allow me to enter the house and she most kindly accords permission, but before entering I notice that an onion is suspended over the door to keep off infection. Her husband is a Koonbi, a cultivator, in only moderate circumstances, by name Ballaji Naik, as the Pátel informs me, for of course no modest Hindu wife would mention her husband's name. He left early this morning to go to the Kusba to try and get an advance on the crop of jowári now growing in his field, for he has had a desperate quarrel with the village money-lender who, he says, cheated him in his last transaction out of the sum of one anna and six pies! I find the family consists of the husband, his wife whose name is Savitri, two children, a boy of about eight who goes to the village school and the little girl of two I saw before, besides his father and mother who live with him, but they are very old and do nothing but help the good wife to keep the house.

248. The house consists of merely two rooms divided by a passage and beyond is a back-yard. In the first room there is no window, and the only entrance for air or light is through the door, which is always kept shut at night. In this front room is a buffalo with its calf, two goats, and there is a place for the tattoo which the husband took with him this morning. The droppings of these animals on the earthen floor have caused such a pungent ammoniacal smell in the room that, at first, it is difficult to breathe, and I am glad to pass into the passage but have to stoop very low to prevent hitting my head against the lintel of the door. I find on one side of the passage there is a well, an *ad*, which is shared by the occupants of the adjoining house. The water is drawn by a rope suspended from a wheel attached to a wooden beam which is common to each house. The ground below the parapet wall is very wet from the wastage water having no channel whereby it could escape. I pointed out to the Pátel how impure the water in the well must be as the urine from the animals must find its way by percolation into it.

249. I do not go further than the doorway of the back-room which is about 12 feet square, because I see that the morning meal is being cooked in one corner of the room over an earthen chula below which is a wood-fire, the smoke from which forcibly recalls the "*lacrimoso non sine fumo*" of my old friend Horace, who must have suffered as I did. It has begrimed the walls of the

room and the rafters supporting the roof, and the warmth has brought out two or three black scorpions which I see on the wall near the window and to which I call the good wife's attention; but I observe the cubic space in the room has been most seriously interfered with by a kind of loft having been erected in it on which cowdung cakes and firewood are stacked, whilst aloft the fowls roost, and the old hen being disturbed whilst sitting on her nest, flies down and runs clacking about, trying to escape outside. The window in the outside wall is small, only about 1′ 6″ square; it is protected by wooden bars. The other end of the room is very dark, and I ask that the door leading into the back-yard may be opened. As soon as it is, I see that the floor is very damp as it has been freshly *leped* with cowdung; and I also notice that the damp extends for at least 4 feet up the walls, so that the occupants sleep on a damp soil and in a damp atmosphere. There is a coir string charpoy hanging against the wall and I ask why they do not sleep on that, but the good wife says it is so full of bugs that sleep on it is simply impossible.

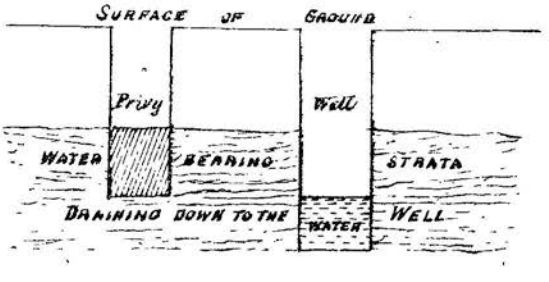
Open cesspool.

250. I find there is another way round to the back-yard, so I go through a neighbour's house and get to it that way. I notice that there is a cesspool outside the wall of that part of the room used for cooking. It is full of the most offensive fluid, which is of black color, with a scum on the top in which there are great bubbles of gas. I ask the Pátel to push his stick down into it and it is evident that the bottom is full of decomposing filth, for, as he stirs it, fresh bubbles rise to the surface in great abundance. It is said to be cleaned out about once in two months when the contents are thrown over the adjoining ground. Not far from it is the flat stone on which the occupants of the house stand whilst they perform their ablutions. The water sinks into the foundation and easily accounts for the dampness observed on the walls, especially when the wastage water from the well is remembered.

Dead vermin.

251. At the far end of the back-yard are two dead bandicoot rats which have been killed and thrown out during the night and our entrance disturbs the crows which had begun to tear them to pieces. I am surprised to find a pit-privy, for these are comparatively rare in the North Deccan though common in the East Deccan, Southern Mahratta Country and Gujarát. This privy consists of a hole about 15 feet deep dug in the soil which here consists of moorum. I am informed that the inhabitants of the adjoining houses pay Ballaji Naik a small sum yearly for the privilege of using it. It has not been cleaned out for the last 25 years, but occasionally the nightsoil in it ferments and bubbles up and flows over the surface. When this occurs, they throw down a quantity of salt, which arrests the fermentation. I find there are no less than three wells within 25 feet of this privy, the nearest being only 15 feet distant from it. I explain to the Pátel and the bystanders that the residents of the adjacent houses not only live day and night in an atmosphere tainted by their own nightsoil, but that the water they use for cooking their food, which they drink, and in which they bathe themselves, is really a dilution of their own excrement. This statement horrifies them and they express incredulity; but after I show them the following diagram published by the Army Sanitary Commission in their Revised Suggestions, they say "Wah Wah! Arree Bapree!" These are true words!

Pit privies.



Marriage procession.

252. As I turn round the corner of one of the cross streets, I hear the sounds of a tom tom and the shrill tones of three brass trumpets which are being blown with all their might by three dissipated-looking men, Wajuntris, who are heading a procession. Behind them seated on a white horse with his fetlocks and tail coloured pink and having a bridle and reins covered with silver plates is a young man of about 18 who is dressed in a yellow coat and large red puggree and who is decorated with garlands of flowers round his neck, and who looks very foolish as we pass. Behind him is a girl of about 10 years old dressed in a red coloured sári with an ornament in the back of her hair which from a distance looks like gold but which is only lac—sealing wax. She is clasping her newly made husband round the waist and is evidently rather frightened lest she should fall off the horse. Behind and on each side are men carrying boards with representations of flowers and trees, like, but larger than, those used in a toy garden, and behind them come the friends, men and women, who are going to the bride's house.

Oil-press.

253. On resuming our rounds I meet an old woman who with two little girls is busily engaged in picking up fresh cowdung which has been dropped by a drove of cattle now passing and to escape which I stop just opposite a house, the ground floor of which is, I observe, below the surface of the road, and on looking through the doorway, I see that this is the residence of the Teli or oil-seller. A buffalo yoked with a bullock, each having leather blinkers over its eyes, are walking round and round in a very small circle. They are yoked to a pole which is inserted into a mill consisting of a double screw and made of wood. The Teli is perched upon this pole and feeds the mill from a basket containing the seeds, whether of the bhui-mung or, as it is more usually known to Europeans, the mung-phullee (the Arachis hypogæa or earth-nut), or of kurdi (the seeds of the Carthamus tinctorius or kusumba, the flowers (safflower) of which are used to extract a red dye. The husks of the seeds are carefully preserved and are pressed into cakes, which form a very nutritious food for cattle and milch cows. I pass through this place but regret to find the back-yard in a similar condition to what I noticed in the last house inspected. I next come across a blacksmith's yard in which a cart-wheel is being tired. The iron tire is made red hot by being placed on a circle of cowdung cakes, which are lighted and blown by bellows to a red heat and whilst red hot the tire is forced on to the fellies of the wheel when water is thrown over it so as to make the iron contract and fit closely to the wood. On looking into the blacksmith's house I see his wife, who was up before day-light, is engaged in grinding jowári in a hand-mill, and as she turns the handle she sings a song relating how clever her little son Krishna was in stealing some butter like his great namesake in mythological times.

Lohar.

Grinding grain.

Rice-husking.

Next door I notice that the surface of the yard in front of the house has been neatly levelled and plastered with cowdung and in it there are 10 or 12 women who are each beating a heap of rice placed over a hole with a heavy stick, shod with iron. They thus separate the husk from the rice which is afterwards swept up and placed in bags, whilst the husks are preserved for food for cattle.

Weavers.

254. A little further on down a cross lane we come to a collection of houses in which Musalman weavers live and find them engaged in plying their trade in the open lane. Both men and women being employed in weaving coarse kumblies. When the women see that I am an European they run away, hiding their faces and calling out Topiwallah, Topiwallah; but as soon as my back is turned they resume their work outside, as they do not apparently mind showing their faces to Hindus. I call one or two of the weavers to me and ask them about the state of their trade and they tell me it is very bad and daily getting worse as they cannot compete with woollen articles of European manufacture and they are simply ruined. Indeed many of their caste fellows have been obliged to abandon this trade and seek other employment. I also learn that ophthalmia is very rife among their community.

255. At the head of this lane is a white-domed musjid which presents a cleanly appearance as it has lately been whitewashed. On looking through the outer door the tank in front of the musjid sparkles in the sun and looks clean and the court-yard is well swept. At some little distance in the rear of this building but shut out from it by a row of houses are the residences of the butchers. These are all Mahomedans and they supply the community with mutton, for not only do Musalmáns eat mutton but Hindus, other than Bráhmins, Buniás, Márwádis, and Lingáyats, do so also. Beef is not allowed to be sold in the village as no cattle are of course permitted to be slaughtered within its limits; but I am informed by a Mahomedan, who has recently joined our party, that occasionally beef is surreptitiously introduced and consumed by the Mahomedans, who, however, are very careful not to let the fact be known. The butchers have no proper slaughter-house, but in the rear of each house is a small court-yard enclosed with mud walls, where the sheep are slaughtered. The butcher uses a long, thin, keen knife, and his assistants throw the poor sheep on the ground and hold its neck back while he muttering a prayer cuts its throat. The blood runs out and soaks into the ground. I was distressed to see that all the sheep were driven into the enclosure so that they witnessed the slaughter of each victim before their own turn came. Nothing can be more cruel. All animals hate and dread the smell of blood, and the terror in these poor creatures' faces was only too apparent. The butchers appeared to be indifferent to it and laughed when I spoke to them on the subject. Outside the yards at the back during the time of slaughtering a pack of hungry dogs collects, one or two of which, at the risk of a blow, dash in and seize a piece of meat. About 6 sheep are killed daily, but occasionally, on the occasion of a big feast, as many as 10. There is, I need not say, no mutton market, but the animals are skinned and cleaned in the back-yards of the butchers' houses and the meat is sold in the verandahs of their front-room. It is horrible and disgusting to see the number of flies swarming on the carcass and on the meat.

Butchers.

256. I now proceed towards the chávdi, but on my way there inspect the houses of several cultivators, some of whom are very well off, but the general conditions of the back-yards are the same as described above. I am concerned to see the way they will persist in keeping their cattle under the same roof which they and their families occupy. In some of the better yards I find the cattle are kept in a stable away from the house but in the same compound; but the condition of these stables is almost beyond description. In some the cattle and buffaloes stand on wooden planks, below which the filth exudes, and in one case, in which I had the ground dug out, I found the black filthy soil extended down to a depth of three feet. The urine all sinks into the ground which is never cleaned. I observed one or two women waiting until the cattle micturated when they took the opportunity to intercept the stream and carried the urine away in *lotás* to drink in expiation of their sins. I pointed out to the Pátel how immensely the collection of these cattle, some 500 or 600 in number, added to the impurity of the air in the village, as all the manure from them is stacked in the compound until it is removed once or twice a year to the fields; and I told him the right thing to do was to build proper stables on a site which, for sanitary reasons, ought to be outside the village, but at all events if they are allowed inside, they should be erected in an enclosed yard on some open spot in the village which could be properly cleaned out every day. It is imperative for health that all the manure should be removed from inside the village every day. He promised to speak to the villagers and let me know what they thought of my suggestion.

Cattle-yards.

257. In this quarter too, I am informed, the principal Gowli (milkman) of the village resides, so I proceed towards his house. He is a tall well grown man of about 35 years of age but already shows a decided tendency to corpulency. He saláms as I approach and on my asking to be allowed to inspect his premises he opens the door leading into the lower floor of his house. On entering this place I count 20 head of milch buffaloes which are so closely packed that they seem to be kept on their feet by leaning against each other. The only entrance for air and light in this long

Gowlis and milk.

narrow room which has so improperly been turned into a stable is through a window about two feet square on one side of the door by which we entered and which is, I am told, usually kept shut. There is indeed another door on the far side, but it leads into the apartments in which the family reside. The walls of the stable were once upon a time lime-washed but they are now filthy beyond description, and I notice that they are quite damp from the condensed breath of these animals. I tell the owner that he ought to keep them in a well ventilated stable in his compound. He laughs and says: "Oh that would never pay! Milch buffaloes give much more milk if they are huddled together in a nice warm atmosphere! I do all I can to keep the place clean. I remove all the dung from the stable every day to the heap in the compound. I acknowledge that the urine soaks into the earthen floor, but what can I do? There are no drains to carry it away."

The heat and smell combined have by this time made me feel quite faint and sick and I am glad to get out of such a stifling atmosphere; but on passing through to the premises at the back, I see the women of the family busily engaged in mixing the milk with water, which on enquiry I find has been drawn from a surface well adjoining the stable, so that it is not difficult to understand how impure the adulterated milk sold to the villagers must be or how injurious it is to their health.

Village chávdi.

258. The sun is now getting hot, and I proceed towards the chávdi and find that it is situated nearly in the centre of the village, and that there is an open space in front of it from which the roads branch off in four different directions. In its neighbourhood are the principal shops. These are quite open to the street, the outer wall being formed by wooden planks which at night are secured by a padlock and chain fixed into the threshold but which are removed very early in the morning by the man who has been sleeping wrapped up in his cumbli on the ledge outside, under which much filth is collected. The various articles are exposed for sale in wooden boxes neatly placed on the floor, whilst on the sides are innumerable compartments like pigeon-holes filled with a very mixed assortment of different things likely to please the rural mind. I

Bania's shop.

see a Bráhmini bull standing in the road opposite a Bania's shop which is greedily devouring the grain exposed for sale, the owner being afraid to drive it away until I take pity on him and give him a sufficient excuse by approaching his shop or store, as it might be more appropriately called, where at the back he has arranged the dál or pulse of the following leguminous plants: the earthnut (Arachis hypogæa, moongphullee or bhui-moong); turchi dál (Cajanus Indicus), tur; chunna (Cicer arietinum), gram; the red coloured mussoor (Ervum lens), ooreed (black gram) and moog (green gram), varieties of the Phaseolus mungo or small kidney bean, and mutt, the Cyamopsis psoralioides; besides the following cereals: gawn, wheat (Triticum æstivum); jowari (Sorghum vulgare), Indian millet; bájri (Penicillaria spicata), which is cultivated as a rain crop; chaul (Oryza sativa), rice. Here there is a box containing coarse salt, next to it a tin holding oil prepared from the kurdi seed and another containing cocoanut oil and a third castor-oil, and there is a box full of red chillies; then round the shop in the pigeon-holes I see a variety of articles such as small brass native lamps designed to burn oil, brass lotás of different shapes and sizes, and gaudily coloured prints of scenes out of the Ramayana drawn by native artists, bottles holding English sugar-plums and peppermint lozenges, Taendstikker lucifer matches, padlocks of different sizes, looking glasses, toy concertinas, pieces of cloth from Manchester with bright coloured handkerchiefs which seem to have a ready sale, variegated skull caps made in Bombay of bright coloured silk and with delicate ornaments on them made of copper but which are thought to be a fair imitation of gold, brass chains and bells for ornamenting bullocks' necks, packets called nara pooree containing a dark red powder called abeer (fragrant powder prepared from various drugs, a pink-coloured powder, goolál (flour dyed with a decoction of red sappan (Puttung) wood), and loban or incense which are used to burn before the god, bags made of string intended to hold rupees and to be tied round the waist, bundles of string, sieves made of wire with tin sides, Manchester piece-goods, &c., &c.

Sweetmeat-sellers.

259. The next shop is that of a sweetmeat-seller, where I see the meethá-vees, dear to children, exposed for sale on bright clean brass vessels. Here are ladoos or comfits made of sugar and gram and wheat flour and doodhias made of milk and sugar and burfees to which pistachio nuts have been added and hulwa consisting of wheat flour and sugar paste with almonds scattered over the surface, sticks of sugarcandy and even toys and necklaces made of sugar, besides parched gram and rice soaked in ghee.

Fruit and vegetable shop.

260. The adjoining shop belongs to a fruit and vegetable-seller and is presided over by a Maráthi woman, who has arranged in little baskets made of wicker work, carrots, potatoes, lettuces, onions, parsley, garlic, tomatoes, French beans, bendies or as they are called by my Purdesi puttávála Rám turais, the elongated fruit of the edible Hibiscus; baingans or brinjals, the fruit of the egg-plant; wálpápri or pod of the black-seeded dolichos; sweet potatoes called rattáloo and which are the tubers of the Convolvulus batatas; dilpasand, the fruit of the Citrullus vulgaris, one of the gourd family; the Rámphul and Sitáphal or varieties of custard apples; bhutás, the grain of the Zea Mays or Indian corn; kokum or the fruit of the Garcinia purpurea which has been brought from the Konkan, the rind of which is used as an acid condiment with curries, whilst the seeds yield an oil which possesses most emollient qualities; cashew nuts, tamarind, melons, cucumbers, plantains, pomegranates, sticks of sugarcane, fresh limes, &c.; besides ginger, nutmegs, cocoanuts, turmeric, tobacco and the leaves which are smoked as beeris.

Pigments.

Scorpion stone.

261. At the next shop Hindus are buying the various pigments necessary to paint the tiluks or marks which they place on their foreheads in honor of the different deities they worship, and here too I see a Vaidoo from the Punjáb who is applying a stone called Jahari Mhora (Poison Stone) to a man's hand who has been stung by a scorpion during the night, and this so-called stone, which appears to me rather to consist of some bituminous substance, is reported to be very efficacious in allaying the pain; and next is a place where at the back two men are working a heavy beam of wood with their feet, with which they are beating cooked rice into small cakes called powa, and in the front part of this shop a woman is engaged in grinding gram which, after being lightly ground, is swept by a small brush made of fine grass on to a tray or fan consisting of strips of bamboo which she gently waves up and down, and thus separates the inner part of the gram from the husk, which is carefully preserved for food for cattle.

Powa.

Husking gram.

Opium shop.

262. In the adjoining shop opium is sold, and it is painful to watch the eagerness with which the wretched votaries seek their morning dose to keep them going after their long abstinence during the night. I also notice that Hindu women are buying small quantities of opium as it is the custom to give children minute pieces to keep them quiet during the day whilst their mothers are at work; and next to it is a liquor shop at which thus early in the day I am sorry to see collected several cultivators who have called for their morning dram of spirit distilled from the flowers of the mowra tree (Bassia latifolia) which has been brought from the Saddar distillery. I am informed at sunset there will be a very numerous attendance and the shop will be crowded.

Liquor shop.

Fish and eggs.
Barbers.

263. By the side of the liquor shop is a small cadjan shed where a poor woman is selling eggs and dried fish brought from Bombay, the smell of which is much complained of by the neighbours. I notice two or three barbers sitting by the side of the road who have just shaved the heads of their customers and are now engaged in removing the hair from under their armpits and in rubbing the skin with fresh lime.

The sides of the road are wet with urine and there is a child about three years of age calmly easing itself in the most innocent way in the centre of it; but the shop-keepers do not pay any attention to such an every-day occurrence.

Opposite to the chávdi there is a pipal tree, and my attention is attracted by a cleft in the trunk, which has been coloured red all round on account of its fancied resemblance to a Yoni; and below it there is a shapeless mass of stone which I am informed is sacred to Márooti. This also has been coloured red and its surface is smeared with oil, and on it have been painted two eyes, although the stone bears but slight resemblance to a human face. Before it grains of rice and the white and red flowers of the Chumpa and Jussoondi have been laid, and on one side of it is a stone on which the soles of two feet have been carved which are supposed to represent the feet of Dattatrya, the incarnation of the Hindu Trinity, and a little further on is an upright carved stone, with two cobras intertwined standing out in relief, and at this place the Táluka Vaccinator has collected all the children he has lately vaccinated. I call out the names from the register, and as each child is brought before me I examine its arms to see whether the cicatrices correspond with the description given in the return. I am glad to see that there are three well-formed, deeply foveated cicatrices on each arm as with that number the child is practically safe from small-pox during the remainder of its life. Some few mistakes are found, but, on the whole, I am well satisfied with the character and amount of work and dismiss the children.

Vaccination.

264. I then go into the chávdi and the Pátel and all the villagers who have accompanied me in my rounds sit down on the floor, and I address them on the wrong conditions I have seen and make suggestions for their removal. This ends my morning work, and I take leave of my friends, who present me with a garland and wristlets of jessamine flowers, which I put on whilst they place some atar of roses on my handkerchief and give me some, cardamom seeds on a pipal leaf. I then drive to my tents, which are pitched under a grove of mango trees about half a mile on the west of the village.

Address to villagers on subject of wrong conditions observed.

265. My tapál has, I am informed by the Haváldár, arrived, having been brought by a peon whom I sent yesterday to the post office in the kusba about 8 miles off, and, on opening it, I find a Government Resolution ordering me to proceed forthwith to Ahmedabad to report on a site for a new central jail. I accordingly drive during the afternoon to the nearest railway station and catch the mail train to Bombay, and, after staying there one day to clear off the arrears in my office, leave for Ahmebabad, where I visit and report on the site selected and then proceed on tour in Gujarát, in the course of which I arrive at a large agricultural town, which shall be nameless in this narrative, but which contains about 30,000 inhabitants. I am met by the native President, Chairman and Municipal Commissioners, who, being old friends, are kind enough to give me a hearty welcome and walk with me to the district bungalow which is at present empty. I arrange for an inspection of the city with them, and name 6 A.M., Madras time, on the following morning as the time of, and the Mámlatdár's kacheri as the place of, meeting. I see my friends for the most part look a little disconcerted, and it is politely hinted to me that 6 A.M. is a very early hour, and that it will be very cold in the early morning; but I point out to them that it is absolutely necessary to make a sanitary inspection before any cleansing has taken place so as to see the actual condition of the surface and thus be in a position to form an opinion as to the purity of the air the people breathe during the night.

Tour in Gujarát.

A town of 30,000 inhabitants.

266. On rising the next morning, there is a fog, which is so dense I can hardly see five yards in front of me, and on going to the appointed place of meeting I find that only four or five of my friends have come and they have their heads well wrapped up and are looking very cold and miserable. Whilst waiting for more of the Municipal Commissioners to join us, I ask whether fogs are common in this town, and they tell me there is during the cold weather always more or less fog in the early morning, but that it clears away shortly after sunrise. This information is almost proof positive that the subsoil must be very damp, and on enquiry I find that the town is exposed to heavy floods during the monsoon. It lies low, and the surface drainage from the surrounding country flows in vast volumes

Fogs due to a damp subsoil.

on either side of it towards a nála on the west of the town which empties itself into the river about eight miles off.

267. A high earthen embankment has been made on the east to prevent the town from being inundated, and on either side are large tanks which are filled by the water thus brought down. The consequence is that the sub-soil water of the town is ponded back and cannot escape as there is no subsoil drainage. The fog is so thick that it would be useless to inspect the town until it has cleared off, so I propose that we should walk to the old fort which is situated on some rising ground on the west, and on ascending one of the towers we obtain a very fine view of the surrounding country. The town is still enveloped in mist and the topmost stories of only very high buildings in it, such as the clock tower, rise above it, but you can trace as distinctly as if it were a river the line of mist which accurately defines the area of depression. Beyond it a very fertile country growing tobacco, cotton, and cereals is seen stretching for miles. It is well wooded and presents quite a parklike appearance.

Area of depression.

268. The sun has now risen and we descend as the mist is beginning to lift. We first go round the outside of the city and I will first describe its water-supply. There are no less than 10 tanks, which are situated outside the town and near the different gates. Many of them are said to run dry at the commencement of the hot weather, but the Moti and Rameshvar tanks contain water all the year round and are much used for bathing, washing, &c., and also for watering cattle. The water in these tanks is not fit for drinking as so much filth is brought down by the floods into them; but the people for the most part draw their drinking water from 23 wells situated outside the town, 10 of which are much frequented. There are also said to be five or six wells in the thickly populated parts of the town the water of which is used for drinking and also for other domestic purposes, and there are three step-wells the water in which is not used for drinking. I am also informed there are as many as 150 wells inside the town which have been rendered brackish by the impure nature of the subsoil, but the water in which is used for bathing and washing. There are said to be 10,500 houses in the town, 300 of which have "tankas" in which rain water is stored for drinking, but these are only to be found in the houses of the richer classes. Seven of the wells outside are reserved for the low-caste people—the Bhangis, Dheds, Chambhars.

Water-supply.

269. In our rounds outside we passed several of these wells. They are all open and for the most part are situated below trees, in one of which I saw a troop of the big apes which are common in Gujarát shaking the boughs so violently that a large quantity of leaves fell into the water, the surface of which was fouled by much foreign matter, and the ground round was sodden with wastage water. I pointed out to the Municipal Commissioners the necessity of cleansing out all the wells annually and urged them to construct covers over them and to pave the surface round the parapet wall on a slope and to construct drains to carry away the wastage water.

Wells under trees.

270. We also passed several very unwholesome excavations which had been made outside the town in which there was a collection of offensive water. By this time we had arrived opposite one of the principal gates leading into the city, and, as the fog had now cleared off, we entered it, and I noticed that the streets and roads are so narrow that in many places two carts cannot pass each other. The Municipality has taken every opportunity of widening them wherever they have been able to do so, but there are very few open spaces in the town, so that the stagnation of air in it is very perceptible. In some of the principal streets road-side drains have been provided, but these are of wrong construction as they consist of flat rubble ⊔ drains, the consequence being that the water in them soaks into the foundations of the houses adjacent to them, and there is no proper outfall for the water which finds its way into them.

Unwholesome excavations.

Narrow streets.

Road-side drains.

Khalkowas for ablution water.

271. I am informed about 432 of the houses have khalkowas into which the household wastage water used for ablution and cooking, as well as the urine, flows; but in the great majority of the houses this sullage flows out into the road to be absorbed as best it may. The necessity for providing impervious channels for the conveyance of this refuse household water to fields outside the city is apparent, but I am informed the funds will not admit of a drainage scheme.

Nightsoil arrangements.

272. About 400 of the 10,500 houses are provided with fœcal khalkowas or, as they are called in this part of Gujarát, datan privies, and there are about 50 open privies in the town. The Municipality has provided seven public latrines in the town, some of which are much complained of as they are situated alongside inhabited houses. There are also 10 enclosures outside the town which are used as places for natural resort, but many of these places are so inadequately provided with a fence that the persons of the occupants are seen by the passers by the roads. I suggested that all these enclosures should be properly levelled and trenched and be afterwards cultivated. They should be enclosed by a wall so as to ensure sufficient privacy to those using them.

Recommendations.

273. The town, as is usual in Gujarát, is divided into Poles or streets approached through only one gateway and ending too often in a *cul de sac*. At the entrance generally of these Poles a space has been walled off which is used as a place for natural resort by all the men and women living in the Pole. The ablution water and the urine soak into the soil, but the nightsoil is removed by private halálkhors. I strongly advised the Municipal Commissioners to order the immediate closure of all the fœcal khalkowas, and I suggested that only latrines, after the standard plan sanctioned by Government, should be permitted. They should be erected on convenient sites in which a compartment, the door of which could be locked, should be allotted to each householder, and the same arrangement should be carried out at the Pole privies throughout the town. When these changes are made, I advised the Municipal Commissioners to impose a halálkhor cess and to keep the removal of all the nightsoil in the town in their own hands. So valuable is manure in this city that the Bhangis have been allowed to make collections of nightsoil near their houses for future sale, and have, I am informed, even rented vacant sites on which they store nightsoil. I saw a large heap of nightsoil close to the Rameshvar Tank. The establishment for the removal of nightsoil consists of—

A fact.

Establishment for removal of nightsoil.

1 Mukádam on Rs. 5,
3 carts @ Rs. 15 per mensem each.
27 sweepers @ Rs. 3 do.

The nightsoil collected by the municipal and private Bhanghis is ordered to be carried to a depôt which is situated outside one of the Bhagols (gates) where it is deposited on the side of a tank the water of which is, however, said not to be now used, and where it is ordered to be mixed with cutchra and sold as manure; but from my inspection of the place, I do not believe that half the nightsoil collected in the town is brought here as I saw but very little, and I am rather inclined to believe that the Bhangis take the nightsoil collected at the public latrines and at the Poles and municipal enclosures to the neighbourhood of their own houses and store it there.

Surface cleaning.

274. The surface of the streets was, during my inspection, very fairly clean, but I learnt that the following establishment is all that is maintained:—

2 Inspectors, 1 on Rs. 13 and the other on Rs. 12 per mensen.
4 Chaukidárs on Rs. 5 each.
62 Sweepers @ Rs. 3 each.

There are no carts and it is impossible that 62 men can carry on their heads all the street sweepings out of the town to the depôt. I advised the Municipal Commissioners at once to provide a cart for each of the four divisions of the town as the very smallest establishment necessary.

The total amount spent in the scavenging and latrine establishments is only Rs. 3,522-10-10 out of a total income of Rs. 29,806.

Storing of manure.

275. Among the offensive trades in this town I must class the storing of manure, the town being an agricultural one, and the tobacco cultivated in the fields surrounding it requiring much manure, it has been the practice for the Kunbis to store inside their compounds, and even close alongside their houses, the dung of their cattle. There are said to be about 5,000 head of cattle in the town, so that it can be easily imagined in what an insanitary condition the houses must be where men, women, children and cattle, are huddled together in small houses and huts situated in narrow streets and in the badly ventilated and thickly populated parts of the town. In some cases I am informed there are pits in which both the solid manure and urine and the cutchra from the houses are all mixed together, to which the women and children resort for natural purposes. These places ought, I tell the Municipal Commissioners, to be closed at once.

Heaps of cowdung.

276. The heaps of solid cowdung are such as, unless I had seen them, I could not have believed possible for men voluntarily to have stored close to their own residences. There is a great art I am told in preventing fermentation taking place and the ooze from the heap is most offensive to a stranger, but although the townspeople who are not connected with agriculture complain most bitterly of the nuisance caused by these manure heaps, the Kunbis will not allow that any nuisance is caused by them and deny that they are dangerous. One Kunbi, to whom I spoke, who had a heap at least 8 feet long by 5 feet high and 3 feet broad of solid cowdung within 3 feet of his house, said, when I complained to him of the smell, "I like it!" I told the Municipal Commissioners that there can be no question from a sanitary point of view that it is a most dangerous practice, and no real sanitary improvement can be effected until it is dealt with. The best course would be to erect stables outside the town and to have the manure stored on a piece of adjacent ground. If this cannot be done, then I think, as is done in some places in Gujarát, the cultivators should be compelled to remove the manure daily to the fields. It is impossible to speak too strongly as to the danger caused by these manure heaps.

A fact.

Wood stacks.

277. A very large amount of wood also is stacked in the town which in the densely populated narrow streets adds much to the obstruction of the air and affords a convenient place for all kinds of filth to lodge. These stacks ought not to be allowed in the town, but the wood ought to be stacked outside.

Tanneries.

278. The tanneries have been, I fear, a long-standing nuisance. These are situated near a gate on the east of the town where there are about 400 khunds or tanning vats in which large skins are tanned. The tanners' ce[illegible] ambhars. Near them are the houses of Mahomedan Khatkis who tan sheep [illegible]ns, &c. They have 115 tanning vats. I selected a site outside the town where [illegible] thought they might safely be placed, and the Municipal Commissioners agreed to acquire the land and to turn the tanners out of the town.

Slaughter-house.

279. I was surprised to find that goats, sheep and buffaloes were allowed to be slaughtered in a slaughter-house inside the town and close to the houses of the butchers. I pointed out to the Municipal Commissioners that no animal ought to be slaughtered inside the city, and they agreed to erect a slaughter-house outside the town.

Offensive trades.

280. The brick-kilns, 21 in number, are all situated outside the town, but the following trades, which are carried on inside, should be removed outside :—

Lime-kilns, 24 in number.
Tile-kilns and Potters, 73 do.

This town was formerly celebrated for the excellence of its dyeing in indigo, but I find there is not now a single indigo dye in it as religious sentiment on

account of the destruction of insect life was sufficiently strong to put a stop to the trade.

Want of proper markets.

281. There are no public markets in the town belonging to the Municipality. The butchers sell the meat in the verandahs of their houses, and grain and vegetable sellers have shops in the streets. The want of proper markets is much felt.

Burning ghâts and burial grounds.

282. There are three Hindu cremation ghâts situated at safe distances outside the town, but the Mahomedan burial grounds are too near it, and those on the banks of the Moti, Rameshvar and other tanks ought to be immediately closed. The burial grounds for low-caste Hindus are unobjectionable.

Registration of births and deaths.

283. I find the registration of births and deaths is far from accurate, the mean birth-rate during the last four years was only 33 per 1,000, and in this part of the country it is certainly not under 40 and more probably 45 per 1,000. Many deaths also escape registration, but I find during last year the recorded death-rate from fever alone amounted to the excessive rate of 42 per 1,000, whilst abowel-complaints reached a death-rate as high as 2·72 per 1,000. These facts alone point to the extreme impurity of soil and water, whilst the mean ratio of deaths among children under 1 year of age was the very high one of 261 per 1,000. This shows more clearly than I can express by words the insanitary conditions which obtain in this town.

Intense fouling of Indian towns and villages.

284. The above narrative affords a faithful representation of the insanitary conditions which obtain in our villages and municipal towns. In fact the description of the town in Gujarát is taken for the most part *verbatim* from a report I submitted to Government in January 1882. No one but those whose lives have been passed in inspecting native towns and villages in India can form any adequate idea of the intense fouling of the surface and subsoil which exists in them. Every condition, which sanitary science has over and over again taught us, is inimical to human life and well-being is found in them. Filth indescribable, filth unutterable, filth in all stages of putrescence and festering decay is present everywhere, fouling the upper surface of the ground, fouling the subsoil, fouling the air the people breathe, fouling the water they drink, clinging to the walls of the rooms they inhabit, fostered by ignorance, apathy, and religious prejudice, so that it is literally no exaggeration to say that the natives of India are born in filth, live in filth and die from the effects of filth.

Dampness of surface and sub-soil.

265. Not only is the surface of the ground on which their habitations stand surrounded by filth of the foulest description but the benignant effects, which nature makes to desiccate these impurities by the heat of the sun and by the action of the winds, are frustrated by the excessive dampness in which the subsoil is kept by no channels having been provided to carry away to a distance the liquid effete matters, which are the necessary concomitants of every community.

Struggle for existence.

286. Human beings in such conditions have a continual struggle for existence, and this is conclusively shown by the terribly high rate of infant mortality which year by year is brought to notice. I gave in my last annual report for example a list of four towns showing the death-rates among infants :—

Age periods.	Deaths per 1,000.				
	Presidency.	Viramgám.	Jambusar.	Ahmedabad.	Ahmednagar.
Under one year	201	462	617	397	252
One and under five years	75	130	91	65	65

Thus the people now living really represent the survival of the fittest, but all who have so survived have been exposed from their earliest infancy to deteriorating influences which have sapped their strength and rendered them less able to resist attacks of disease when it comes. Hence there arise those devastating epidemics of cholera which year after year entail such an incalculable amount of misery and sorrow on tens of thousands of families throughout the country, and which, I may respectfully say, reflect such discredit on our intelligence and humanity. Nor is cholera even the most fatal scourge with which nature revenges herself on an ignorant people for their defiance of her laws, for whilst it slays its tens of thousands, fevers of deadly and malignant type annually kill hundreds of thousands of victims, and those epidemics of small-pox arise which all our well sustained efforts for protecting the people by vaccination are so powerless to control; whilst bowel-complaints each year cause a very heavy, but entirely preventible mortality.

The penalty paid for neglect of nature's laws.

287. Besides these localised causes of disease it must not be forgotten that the people are badly fed and insufficiently clothed. They live and die for the most part beyond the reach of medical aid, except in the comparatively few places where dispensaries have been established. There is in India no system of poor law relief as in England. They at all ages lead a hard life, whilst at times they are dominated by the terrors of their consciences and by the doctrines of their religion, which prompt them to make pilgrimages to the shrines of their national gods in the hope of obtaining remission of their sins. At such times they undergo great privation and much fatigue, and arriving at the place in a state of great religious excitement, fall ready victims to any epidemic influence which may be present.

Poverty of the people.

288. In villages there is absolutely no establishment to remove the wrong conditions I have pointed out. Whenever a Sáheb, such as the Assistant Collector, is known to be about to visit a village, the Patel gets the Mahárs to sweep the principal thoroughfares and the outskirts near the gate of arrival; but Assistant Collectors, as a rule, with some brilliant exceptions, take but slight interest in the sanitation of villages. I have in a former part of this report acknowledged the aid afforded to this Department by the scrutiny to which district officers subject the village registers and they also take an interest in the condition of the dispensary, the school and the public well; but they are chiefly concerned in revenue matters or in settling land disputes, &c., and neither believe in or care about the importance of having a clean surface, and as they have had no sanitary training, they do not even know where to look for dangers, and when they walk through a village they keep to the streets and thoroughfares and do not visit the interiors and backyards. As I write this sentence, I have received from Government a copy of a report by the late Collector of Násik on the recommendations made by the Surgeon-General, Her Majesty's Forces, and myself on the sanitary defects of the villages in the neighbourhood of the large Military station of Devláli in which we objected to the uncleanly pigs found wandering through the villages, eating human excrement, with reference to which the Collector says: "I am unable to agree with the anathema against pigs, which I regard, in default of better, as very fair scavengers." When such views are held by executive officers of Government, it will be seen how hard it is to introduce sanitary reform into India.

No establishment for cleaning villages.

289. It is as well perhaps to state that the only enactments which refer to sanitation in villages are contained in certain sections of Regulation 12 of 1827, of the Bombay District Police Act of 1867, and of the Bombay Village Police Act of 1867. Regulation 12 of 1827 gives power to the Magistrate to make rules respecting dharmshálas, liquor shops, public wells and the gates, and generally all places of public resort, and to regulate the hours at which they are to be open and the manner in which they are to be used, &c.

The existing laws regarding village sanitation.

It also provides a punishment for violation of such rules and empowers the Magistrate to inflict a fine not exceeding one month's computed average income of the culprit, or to sentence him to ordinary imprisonment without labour not exceeding one month, or any of these combined.

290. Section 31 of Act VII of 1867 (The District Police Act) enacts that :—

"In any town or other place in which there is a Magistrate resident, or in any town or other place or on or close to any public road, to which town, place or road the operation of this section shall be specially extended by Government by notification, any person who shall offend as follows so as to cause obstruction, annoyance, risk, danger or damage to residents or passengers shall, on conviction before a Magistrate, be liable to a fine not exceeding fifty rupes, or, in default of payment, to imprisonment not exceeding eight days, and it shall be lawful for any Police officer to take into custody, without a warrant, any person so offending within his view, that is to say :—

Persons in any town or place causing obstruction or damage, &c., to residents or passengers liable to a fine, &c.

* * * * * * * *

"2. Any person who bathes or washes in, or otherwise defiles, or causes to be defiled any public well, tank, reservoir or watering place, so as to render it less fit for any purpose for which it is set apart : provided that a prohibitive notice in the language of the district shall have been fixed in a conspicuous place contiguous.

Bathing in or defiling any tank or reservoir.

* * * * * * * * *

"4. Any person who, on or close to, and within sight of, any public road, street or thoroughfare, slaughters any cattle, or cleans any carcass or hide * * * * * or commits nuisance * *.

Slaughtering cattle within sight of any public road or commits nuisance.

"XXXIII.—Any person who, on any public thoroughfare, without the permission of a Magistrate or Municipal Commissioner, constructs any booth, shed, stable or the like, or lays down any stones or building material ; or who, within the limits or site of any town or village, without sufficient cause, wilfully allows to accumulate any offensive matter in cesspools, dung heaps or the like, so as to cause annoyance to the neighbouring residents or to passengers, or who, without sufficient cause, wilfully allows any offensive matter to issue on to any public thoroughfare from any house, factory, stable, privy, or the like ; or who deposits the bodies of dead animals, or refuse or filth of any description either in channels which in the rainy season feed any tank or reservoir set apart for drinking, or in other places where to deposit such is offensive to the community ; or who, in disregard of established rules or the order of a Magistrate, stacks or stores grass or other inflammable material within fifty yards of a dwelling-house, out-house, or other building, or fails to remove the same when so stacked or stored ; or who disobeys the order of a Magistrate given in respect to land in or near towns, villages or dwelling places, or in or near public roads and thoroughfares for the pruning of hedges or for the pruning or removal of overgrown prickly-pear or other vegetation, the unchecked growth of which is likely to be injurious to health, shall be punishable for and every such offence, on conviction before a Magistrate, to the extent of 50 rupees fine or, in default of payment, to imprisonment not exceeding 8 days : provided that no person shall be required to prune a hedge below three feet in height and 3 feet in width.

Common nuisances.

"XXXIV.—Whenever the removal of prickly-pear or other vegetation, or of any nuisance from the common or waste land of any town or village shall, in the opinion of a full-power Magistrate, be necessary, it shall be lawful for the said Magistrate to order such removal by a general notice addressed to all persons having an interest in the said common land, and to the inhabitants of the town or village at large, which notice shall be affixed to the chávdi or other principal place of public resort ; and if, within a reasonable time, being not less than seven days, to be specified in the said notice, the order be not carried out, the Magistrate may cause the vegetation or nuisance to be removed, and on the requisition of the said Magistrate the cost of the removal shall be assessed and levied from the inhabitants in the manner provided in Sections XVI. and XVII. of this Act."

Removal of prickly-pear or any other nuisance from waste land of town or village.

291. Bombay Act No. VIII of 1867 (The Village Police Act) defines the duties of the Police Pátel and gives him authority over the village servants by the following two sections :—

"VI.—The Police Pátel shall, subject to the orders of the Magistrate of the District, act under the orders of the Magistrate within whose local jurisdiction his village is situated, whom he shall furnish with any returns or information called for, and keep constantly informed as to the state of crime and all matters connected with the Village Police, the health and general condition of the community in his village. He shall also afford all Police officers every assistance in his power when called upon by them for assistance in the performance of their duty. He shall further promptly obey and execute all orders and warrants issued to him by a Magistrate or Police officer, shall collect and communicate to the District Police intelligence affecting the public peace, shall prevent within the limits of his village the commission of offences and public nuisances, and shall detect and bring offenders therein to justice.

Duties of Police Pátel.

His authority over village servants.

"VII.—The Police Pátel shall have authority to require all village servants in whatever capacity ordinarily employed to aid him in performing the duties entrusted to him, and it shall be the duty of the Village Revenue Accountant, whether hereditary or stipendiary, to frame all witten returns and proceedings for the Police Pátel."

292. Clause 1 of Section XV. enacts that the Commissioner of Police may authorize the Magistrate of the District to issue a commission to Police Pátels to try for certain offences, and Section XVI. runs as follows :—

Punishment for certain nuisances.

"XVI.—The Police Pátel, when and as long as he shall be empowered under Section XV., Clause I., shall also have authority to punish by a fine not exceeding one rupee, or, in default of payment, by confinement in the village chávdi for a period not exceeding 12 hours, any person committing any of the nuisances or disorderly acts below described, and to forbid the continuance or repetition of such nuisances or acts, that is to say,

* * * * *

Bathing or washing in any public reservoir.

"2. Any person who bathes or washes in, or otherwise defiles, or causes to be defiled, any public well, tank or reservoir, so as to render it less fit for any purpose for which it is set apart.

Depositing dirt, filth or rubbish in forbidden places.

"3. Any person who deposits in forbidden places any dirt, filth, or rubbish.

Committing nuisance by easing himself.

"4. Any person who, on any public street, passage or thoroughfare, commits nuisance by easing himself.

Accumulates offensive matters in cesspools.
Dead animals.

"5. Any person who, without sufficient cause, wilfully allows to accumulate any offensive matter in cesspools, dung heaps or the like, so as to cause annoyance to the neighbouring residents or to passengers, or who, without sufficient cause, wilfully allows any offensive matter to issue on to any public thoroughfare from any house, factory, stable, privy or the like, or who deposits the bodies of dead animals, or refuse, or filth of any description either in channels which in the rainy season feed any tank or resevoir set apart for drinking, or in other places where to deposit such is offensive to the community."

These sections have always been a dead letter.

293. I have given the above sections *in extenso* in order to show how utterly inadequate some of them are to meet the requirements of sanitation, as they are so hedged in with conditions that no action could be taken. I do not know who framed them, but whoever did so could have had but little acquaintance with the inner life of the people, for who, that knew the actual state of villages, could have supposed that any "offensive matter in cesspools, dung heaps or the like," would ever be considered by the public themselves "to cause annoyance to neighbouring residents or passengers." All such words or expressions in an Act regarding sanitation do infinite harm and cause it to be a dead letter as these sections have been.

294. Government has shown itself to be fully aware of the necessity for making another step in advance and one calculated to be of real advantage to the people.

The views of Government in 1886 regarding village sanitation.

In its Resolution No. 1154, dated 29th March 1886, regarding village conservancy and sanitation, which is pregnant with the promise of the speedy introduction of a legislative enactment which will meet the sanitary requirements of village life, Government has very carefully considered the measures which are, in its own words, *absolutely necessary and practicable*, as will be seen from the following extracts, which leave but little to be desired in an Act which in the first instance must be tentative in its scope :—

"Government have determined to grapple with such evils as they believe to be removable or avoidable under the existing conditions of Indian society. In the forefront of the rightful demands the Governor in Council would place a supply of pure water. No more legitimate use can be made of local funds. The attention of Collectors is often called, and will, through this Resolution, again be called to the necessity of deferring expenditure of a less urgent character until this crying want is satisfied.

"2. Limiting village sanitation to what is absolutely necessary and practicable, the Governor in Council is of opinion that the following measures should be adopted :—

(1) Daily scavenging by hereditary scavengers, and where they do not exist, by paid ones, should be enforced. In places where there are no hereditary scavengers, it may be possible to obtain scavengers by giving persons of the scavenging class, willing to settle

down in the village, grants of land as a watan, and to a very limited extent cash allowances might, where absolutely requisite, be sanctioned.

(2) The 'baloota' of the hereditary scavengers should be recovered as a revenue demand—no longer in the civil courts.

(3) It should be prohibited—

(*a*) To deposit dirt, or store manure or rubbish, except in places assigned for its reception.

(*b*) To relieve nature in places where it would be of detriment to the public health to do so, or in any place where such an act may be forbidden. Suitable places should be set aside for purposes of nature.

(*c*) To use wells and tanks set apart for drinking in any other way and to defile any water-courses which may communicate with such wells and tanks by washing clothes in them or otherwise rendering the water impure.

(*d*) To stall cattle in forbidden places.

(4) Wells should be so constructed as to prevent their pollution.

(5) Prickly-pear and other noxious vegetation should be removed.

(6) Holes and cavities and marshy ground and old wells should be filled in.

(7) Rubbish and débris for which individuals cannot be proved responsible should be removed from the village site.

(8) The village site and vicinity should be drained.

(9) The road-side gutters should be kept clean.

(10) Bodies of Hindus should not be burnt above stream in a river or tank from which drinking water is drawn; the burning ghâts on a river should always be below the place from which drinking water is drawn.

(11) No burial-grounds should, in future, be allowed inside the village and all graves should, where circumstances allow, be six feet deep.

The set of regulations which will be required for each village to carry out in detail the general principles laid down in this paragraph will have to be submitted by the Mámlatdár to the Assistant or Deputy Collector and ratified by the District Magistrate after giving Táluka and District Boards an opportunity of expressing their opinion. The District officers when on tour can easily convince themselves how these regulations are carried out. Vaccinators, when they make their rounds, can report anything which is amiss to the Deputy Sanitary Commissioners. The Surgeon-General should instruct the Civil Surgeons to report on any omissions noticed by them in villages which they may be able to visit.

"3. Section 34 of Act VII of 1867 provides for the removal of prickly-pear or other vegetation *or of any nuisance* by means of the labour of the villagers, or, in default of their contributing their labour, at their expense. It is doubtful whether much use has ever been made of this section, but if proper advantage were taken of its provisions, it would, as it seems to the Governor in Council, suffice to meet the requirements of the case. If holes are not to be filled up, prickly-pear uprooted, and other nuisances removed by voluntary labour as contemplated by the Act, the burden of carrying out such measures would devolve on local funds, but the Governor in Council feels sure that the village people would deprecate expenditure from those funds so much wanted for other purposes and willingly contribute their labour.

"4. In villages the Pátels are the representatives of the Central Government, and it is necessary, therefore, fully to utilize their services even where they may not be as competent and efficient as might be desired. The Governor in Council is not opposed to enlargeing or rather defining the powers of the Police Pátel under Act VIII of 1867, and to give a right of summary and cheap appeal from his decisions. It seems to him that the Pátel must be made responsible for enforcing by fine the observance of some clearly expressed regulations for his village, and if he is punishable for failure he should be rewarded for efficiency for which the Governor in Council would not decline to sanction a small grant from the public revenue. The regulations Government have in view would be chiefly prohibitions. The Pátel would be required by legislation to punish breaches of the general and special sanitary regulations for his village by fine to be recovered as land revenue. The Mámlatdár or Assistant Collector would report yearly how those regulations were observed and the Pátel would be warned, punished, removed or rewarded according to results. Powers under Sections 15 and 16, Bombay Act VIII of 1867, might be given to all or most of the Police Pátels, and under the amended law they would be able to deal with most offences against proper sanitation.

"5. It is necessary to review the question of the emoluments of the village scavengers, the Mahárs, Mángs and other low-castes. It is the wish of Government to increase rather than to reduce their small allowances. And if they have by custom claims on the villagers for handfuls of grain, &c., which the villagers under modern settlements avoid, these should be secured to them by legislation and help given to them to recover their dues. They constitute the only scavenging establishment which Government can afford to maintain on a large scale at State cost.

"It will be necessary to provide by legislation that the Civil Courts shall have no jurisdiction in regard to claims for customary fees or perquisites made by any hereditary village officer; that such claims shall be investigated by the Collector or by any Assistant or Deputy Collector or Mámlatdár empowered by him to do so, and that the claim, if allowed, shall be enforced as a revenue demand. But it should be added that the Collector or other officer aforesaid shall not be bound to enforce such demand, if, in his opinion, the duty attached to the said village office has not been duly performed.

"6. Other modifications of the existing law appear desirable. In Clause (2) of Section 16 of Bombay Act VIII of 1867, to the words 'well, tank, [or] reservoir' the words 'or stream' should be added; in clause (5) the words 'so as to cause annoyance to the neighbouring residents or to passengers' 'without sufficient cause' should be omitted, and 'dangerous and offensive' substituted for 'offensive' in the last line. In section 17, the words 'and it shall be optional with the complainant to withdraw his complaint at any time before conviction is recorded', should be omitted. Ordinarily in such cases there will be no complainant, and as the acts enumerated are offences injurious to the public health, there is no reason why they should be condoned because an individual does not wish to proceed further in the matter. It should be the duty of the Police Pátel to take cognisance of all such offences without any complaint."

Government recognises the only agency by which villages can be cleaned and which Government can maintain on a large scale.

295. Government in the above Resolution fully recognises the absolute necessity for restoring the rights of the village Mahárs, for, as it so truly says, "they constitute the only scavenging establishment which Government can afford to *maintain on a large scale at State cost* (the italics are mine), so that it is clear Government recognise the necessity for maintaining a scavenging establishment in the villages at State cost.

Government orders a draft bill to be prepared to give effect to measures named in the Resolution.

296. In the concluding paragraph of the Resolution Government was pleased to order a draft bill to be prepared to give effect to the proposals contained in the above extract, and directed the Divisional Commissioners, in consultation with the Surgeon-General with the Government of Bombay, the Legal Remembrancer and the Sanitary Commissioner, to consider and report on the bill and the different questions contained in the Resolution.

First draft bill withdrawn.

297. This order of Government was carried out and a draft bill was submitted, which, though not quite as full as I had hoped it would have been, still contained several excellent working sections, which, if they had become law, would have provided funds and the agency requisite for the cleansing of the villages; but I regret to say that for some reason I don't know, this bill appears to have been withdrawn, for during the year another draft bill was sent to me by Government for opinion.

New draft bill utterly inadequate.

298. Remembering the Resolution I have quoted above, which I had looked upon as the Magna Charta of Sanitary Reform in India, and in which Government had so emphatically stated the measures which it considered to be *absolutely necessary and practicable* for ensuring village sanitation, I read the provisions of the new draft bill with the feelings of the greatest dismay. It is simply a republication in one document of the sections I have quoted above from the existing laws with the addition of four new sections (two regarding water, one regarding cattle and one referring to the disposal of the dead), which are excellent in their way but much too meagre for practical purposes.

Comparison between new and old draft bills.

299. In the old draft bill there were regulations (as it is so important there should be) telling the villagers what they were and what they were not to do. It provided an agency and funds. Neither have been provided in the new bill. It provided for the daily cleansing of the village, but it would be simply impossible to cleanse a village under the provisions of the new bill.

I am certain that the new draft bill will satisfy no one who is interested in the question of sanitary reform in India, as it will not have the slightest effect in preventing or arresting the ravages of epidemic disease. The original bill was at all events definite in its purpose. It instructed the people as to what was required of them and told them what they were and what they were not to do.

This is, I am convinced, the right line to work upon. The rural population of, at all events the Bombay Presidency, will carry out orders when they receive them; but the orders must be clear, and it is no good telling a man what he is not to do unless you tell him at the same time what he is to do, and no legislative enactment will meet the sanitary requirements of the question unless provision is made in it for the *persistent daily cleansing of all villages.*

Government of India's views about the draft bill.

300. The following extract from the letter from the Secretary to the Government of India, Home Department, Sanitary, No. 340, dated 22nd November 1887, reviewing the annual report of the Sanitary Commissioner for the Government of Bombay for the year 1886 and published in Bombay Government Resolution, General Department, No. 217, dated 20th January 1888, will show what measures the Government of India considers necessary to be provided for in the bill for village sanitation :—

"6. The importance which the Government of India attaches to the prosecution of sanitary measures on a more systematic plan in municipalities has already been brought to the notice of the Government of Bombay in paragraph 5 of Home Department letter No. 82, dated the 22nd July last; and as the bill regarding the conservancy of villages in the Bombay Presidency is now under the consideration of the Local Government, I am to express a hope that in the orders that may be issued on the subject, due prominence will be given to the suggestion made by the Government of India for a systematic survey of villages in order that plans and estimates of the necessary improvements for efficient drainage water-supply and conservancy should be prepared. The plans so fixed upon should be executed from year to year as funds become available, the object aimed at being persistently kept in view until it is attained. A full notice of the progress made each year in this respect should be embodied in the Sanitary Report of the Province."

What the new Act should include.

301. I think the new Act for village conservancy should, besides legislating for the various points included in the old draft bill, distinctly state that Government has determined that the surface and sub-soil in villages must be kept clean and that therefore pit-privies will no longer be allowed.

Pit-privies.

In all cases where these are in use, 6 months will be allowed for the owner to put up an open privy, after the expiration of which time every pit-privy in the Presidency and every fœcal khalkowa, &c., will be filled in at the expense of the owner and closed;

Places for public resort.

that outside every village certain places will be allotted for the people to resort to for natural purposes, and that any one caught easing him or herself outside these places will be punished;

Wells and tanks.

that as regards wells and tanks, the directions of the Army Sanitary Commission are to be carried out;

Excavations.

that all existing excavations near villages must be filled up or drained, and that no new ones will be allowed in any circumstances;

Prickly-pear.

that all prickly-pear is to be cut down and buried under 3 feet of earth as the only effectual means of destroying it;

Offensive trades.

that all offensive trades (tanners, potters, tile-burners, lime-kilns, indigo-dyers, &c.,) are not to be allowed within a distance of 400 yards of villages;

Wells for Mahárs and Mángs.

that the Mahárs and Mángs shall in all cases have a well told off for their use and not be dependent on the charity of Hindus for their drinking water;

Pigs.

that no pigs be allowed to wander about the village, &c.;

Rivers, pollution of.

that no pollution of the banks and beds of rivers such as is pointed out in the report be permitted;

Surface drainage.

that the surface drainage of the village be ensured by the provision of road-side gutters and of a proper outfall;

Back-yards.

that back-yards be frequently inspected and no nuisances or accumulation of kutchra be allowed in them;

Ruined houses.

that ruined houses be levelled, cleared and enclosed;

Urinals.

that places be told off as urinals in the street and that persons making water in other than authorized places be punished;

Ventilation.

that means of communication with the external air other than through the door and roof be provided for every room in a house, whether inhabited or not;

Lime-washing.

that every house shall be lime-washed inside and out twice during the year, first in April and again in October;

Cesspools.

that no closed cesspools be in any circumstances permitted and that all cesspools be, as far as possible, abolished, and that every house must communicate by an impervious drain with the road-side gutter; that in cases where exceptionally a cesspool is permitted, it shall be cemented inside and have the top open to the air, and be regularly cleaned twice a week;

Animals inside houses.

Stables.

that no cattle, goats, sheep, fowls, &c., shall be kept inside houses, but all cattle shall be stalled outside the village; but if for exceptional reasons it is permitted to have a stable inside the village it shall be only allowed on an open space and be properly enclosed and drained;

Slaughtering.

that no slaughtering be permitted inside villages;

Milk and ghee adulteration.

that the mixing of water or any foreign substance with milk or the mixing of any foreign substance with ghee shall be punishable with a severe penalty;

Cleansing establishment.

that an establishment of scavengers and bhangies on a scale to be fixed by Government be maintained in each village for cleansing purposes.

Law under which Municipalities work.

302. All Mofussil Municipalities, of which there are 161 in the Presidency, work under the provisions of the District Municipal Act of 1873 and its Amendment Act of 1884. In my opinion, these Acts require several amendments and alterations. The sanitary clauses are in some cases loosely worded. For example, take section 55, which runs as follows:—

"Whoever, being the owner or occupier any building or land, keeps or allows to be kept, for more than twenty-four hours, or otherwise than in some proper receptacle, any dirt, dung, bones, ashes, nightsoil, filth or any noxious or offensive matter, in or upon such building or land,

or suffers such receptacle to be in a filthy or noxious state,

or neglects to employ proper means to remove the filth therefrom and to cleanse and purify the same,

or keeps or allows to be kept in or upon such building or land any animal in such a way as to be a nuisance,

shall be liable to the penalties hereinafter provided."

Necessity for more clearness in the wording of Acts.

303. This is the section under which the fœcal khalkowas at Ahmedabad and the pit-privies at Belgaum were closed, but many Municipal Corporations think, and I agree with them, that it is not sufficiently distinct. Government have always recognised the danger of pit-privies, and I hope that, as one of the most crying sanitary wants in the Presidency, a section may be introduced forbidding their use in express terms. Government should make up its mind not only regarding pit-privies but also regarding the stalling of cattle within inhabited areas and legislate accordingly. In my opinion all the sanitary clauses require remodelling.

304. The object of all sanitarians is to obtain for the people *pure water, pure air, pure soil, and pure food.* In an Act providing for the sanitation of villages, it may perhaps be thought a too advanced a measure to introduce a section regarding purity of food, but there can be no question from a sanitary point of view that section 68 of the District Municipal Act should be amended. It only now confers powers to seize and, by order of a Magistrate, to destroy articles unfit for food or drink, but under its provisions it would be impossible to take action against a Gowlie, who had mixed the milk he sells with impure water or the grocer, who adulterates his ghee with animal fat.

Object of sanitation.

305. I cannot too strongly insist on the necessity for protecting milk from adulteration. It is the principal food of children and sick people, and, as far as my experience goes, no pure milk is ever sold in the bázárs. Since this was written two Judges of the High Court of Bombay have decided that it is no offence according to the existing law to mix water with milk! Surely it is time for the law to be altered and to make this dangerous practice penal.

Milk.

306. Again I find it is usual in Municipalities for the Chairman and members of the committee in charge of sanitation to be appointed for so short a period as three months. It takes all that time for the committee to learn their work, and no sooner are they beginning to take interest in it than they are replaced by a fresh committee. In my opinion, the Sanitary Committee should be appointed for not less a period than one year, as during that time an active and intelligent Chairman would be able to effect real reforms in sanitary matters. I also think that if a member of the Sanitary Committee is absent for two consecutive meetings (except on account of illness) he should, *ipso facto*, be held to have vacated his appoinment, and thereupon the President should immediately take steps to appoint another member to fill his place during the remainder of the term for which the committee was originally appointed. Some such ruling is really necessary and would tend to stir up a healthy emulation on the part of the leading citizens.

Procedure.

307. There can, I think, be no doubt that although the people on this side of India did not want and were not sufficiently advanced for local self-government when it was so unexpectedly thrust upon them, yet there are many indications that, as time goes on, it will prove a success and of great assistance to the Government. Of course, at first there were many *contretemps.* In one municipality for example, the very first resolution the Municipal Commissioners passed was that each house-owner should be at liberty to dig a cesspool in his back-yard, which practice the Collector had successfully stopped. In another, they voted a large sum out of municipal funds to feed Brahmins and cows, and in a third I know, the native President is at bitter feud with the Chairman, the result being that every proposal brought forward by the one is immediately negatived by the followers of the other, and, naturally, everything in that town is at a dead-lock. Still with all these drawbacks, which are no more than were foreseen, there is, I am thankful to think, an increasing desire for sanitary reform in every part of the country, which is slowly but steadily extending, and which will, I earnestly hope, before very long, if Government favours it, bear good fruit.

Local self-government.

308. This desire has to a very great extent been created by the invaluable memoranda published by the Army Sanitary Commission, which have in the past and will, I hope, in the future do so much real good by instructing municipalities in true principles of sanitation.

The good effected by the memoranda of the Army Sanitary Commission.

309. The Resolution of the Government of India, Home Department (Municipalities), No. 82, dated 22nd July 1887, reviewing the reports on Municipal Taxation and Expenditure in the Bombay Presidency for the year 1885-86 which was published in Bombay Government Resolution, General Department, No. 2939, dated 24th September 1887, states in paragraph 5 the course the Government of India wishes to be taken regarding municipal towns:—

The Resolution of the Government of India regarding municipal towns.

"5. In regard to the general question of sanitation in mofussil municipalities, it appears to His Excellency the Governor General in Council that the time has come for the prose-

cution of sanitary measures on a more systematic plan than has hitherto been adopted as a rule. The recent municipal legislation has endowed local bodies with very considerable powers for the improvement of the sanitary condition of towns and villages and has placed at their disposal considerable funds for expenditure on that object. It is therefore of the utmost importance that the money thus made available should be laid out to the best purpose on well-devised schemes of permanent utility. I am, therefore, to suggest to the Government of Bombay that a sanitary survey of each municipality in the province should be with as little delay as possible undertaken by the Sanitary Commissioner and by the local engineering authorities, and that plans and estimates may be prepared of all the improvements necessary to provide each town with an efficient system of drainage, water-supply and conservancy. The plans so fixed upon should be executed from year to year as funds become available, the object aimed at being persistently kept in view until it is completed. The Government of India will be glad to learn from each year's report the progress made in the execution of the policy thus recommended for adoption to the Government of Bombay."

310. In connection with the above Resolution I would, however, call attention to the Resolution of the Government of India, Home Department, Medical, No. 10-533-44, dated 29th September 1887, regarding the proposal made by the Finance Committee to amalgamate the appointments of Sanitary Commissioner and Surgeon-General, in paragraph 2 of which the statement made in paragraph 5 of the first Resolution is again made to the effect that "municipalities * * * have under recent legislation been endowed with large powers for improving the sanitary condition of towns and villages and have been placed in possession of funds for this object." The Government of Bombay in their Resolution, General Department, No. 3464, dated 16th November 1887, pointed out that in making these statements "the Government of India appear to be under a mistaken impression as regards the latter part of this assertion as far as municipalities in this Presidency are concerned. The facts are that under the legislation referred to much of the money which the municipalities were formerly able to spend on sanitation because Local Funds were erroneously charged for municipal education, they are now by law compelled to expend upon education and therefore such funds as they may require for sanitation they will have to raise by additional taxation to which they are disinclined."

Failure to get Municipal Commissioners to give effect to wishes of Government of India.

311. I may here mention that during my late tour to all the principal towns—Surat, Broach, &c.—I tried my utmost by addressing them collectively and by writing to the President to get the Municipal Commissioners to give effect to the wishes of the Government of India as expressed in paragraph 5 of the above Resolution by making adequate provision in the budgets for water-supply, surface-drainage, conservancy, registration of births and deaths, &c., but, I regret to say, I met with very little success, and most of my proposals were refused. Surat has no excuse. Her income is larger than that of Ahmedabad, but she has not men among her citizens of the stamp or calibre of Ráo Bahádur Ranchorelal Chotalal, C.I.E., who has done so very much for the cause of sanitary reform in Ahmedabad; but the Municipal Commissioners of Surat for the most part consist of a body of native gentlemen who are afraid to excite popular opinion against them and thereby endanger their seats if they vote for measures, which in their consciences they know to be necessary. Surat is already paying the penalty of the ignorance and apathy of her city Fathers, for since the 3rd December 1887 there has been in it a severe outbreak of cholera, which lately has assumed a very virulent type, and, in my opinion, the Municipal Commissioners are morally responsible for these deaths. I was glad to receive a Government Resolution warning them that if practical and sufficient steps are not taken without delay to improve the sanitary condition of the town, Government will be compelled to intervene and to exercise the powers conferred by law. I hope this Resolution will be circulated to all Collectors as it will stimulate laggard municipalities and teach them what they may expect if they fail to do their duty, as laid down in section 24 of the Act.

Failure of Municipal Commissioners of Surat to do their duty.

312. But the great question, both in municipalities and in villages, which will have to be solved is how are the necessary funds to be raised to carry out the structural works which are absolutely required? It is evident that money must be provided from

How are funds to be raised.

somewhere, but whether this expenditure should fall on Government in the first instance or on each individual town or village is a question which Government alone can decide. All I would urge is that on account of its difficulty it should not be quietly shelved. Too important issues are at stake; for year after year in present circumstances a terrible waste of human life goes on, unheeded, and unchecked, among the 16 millions of Her Majesty's Indian subjects, who are committed to the charge of the Government of Bombay, in spite of the representations, annually made to it, by the Army Sanitary Commission and by its own Sanitary Commissioner. Is this state of things to continue? Does not a very grave responsibility attach itself to the Government for delaying to take the measures it has itself acknowledged to be needful?

Question involves too important issues to be quietly shelved.

313. During the year the Government of India, in reply to an application under the provisions of the Local Authorities Loan Act from the Ahmedabad Municipality for permission to raise, for stated municipal purposes, a loan of Rs. 4,10,000, which, it was proposed, should be repaid within a period of 50 years, only sanctioned a loan of Rs. 3,00,000, in the open market, at a rate of interest of not more than 5 per cent., in order to carry out a part of the scheme for the supply of water to the town, and further stated,—"His Excellency the Governor-General in Council is, however, opposed to the term for the repayment of loans, raised by Municipalities, being ordinarily fixed at more than 30 years, and accordingly desires that the terms of repayment shall be so arranged that the loan shall be discharged within that period."

Reply of Government of India to an application from the Ahmedabad Municipality to raise a loan of Rs. 4,10,000, repayable within 50 years.

The Government of India only sanction a loan of Rs. 3,00,000 and order it to be repaid within a period of 30 years.

This Resolution of the Government of India will have a most potential and very adverse effect on the question of the introduction of sanitary reform into India, for it will be simply impossible, if such a short period is fixed for the repayment of loans, for Municipalities to undertake structural works either of water-supply or drainage. A much longer period than 30 years for the repayment of loans is absolutely required. In England this is fully understood and I hope a wiser policy will be followed in this country, for it is manifestly unfair to throw the burden of paying for the cost of structural works which will benefit the town for all time on the existing generation of its inhabitants, and it is only right that the succeeding generation should bear its fair share of the primary cost.

Besides such a Resolution has a very bad political effect among the Natives, for they not unnaturally say that it is evident that the Government has no belief in its own stability and that it is afraid to sanction loans to be repaid within a period of 60 years, lest the Empire should, before the expiration of that time, have passed into other hands. I earnestly hope that this question will be reconsidered, as otherwise I much fear that sanitary works in our Municipalities cannot be carried out.

314. If an Act for village conservancy and sanitation be introduced, it is evident that it will be necessary to provide some agency to see that the scavengers really perform their duties, and this leads me to speak of the pressing necessity which exists for the reorganization of the Sanitary Department and for entrusting its officers with what they do not now possess, *viz.*, executive powers as regards sanitation.

Necesssity for reorganizing the Sanitary Department.

315. The Sanitary Department as at present organized consists of five Deputy Sanitary Commissioners who are entrusted with the duty of compiling the birth and death registers received from each village in their Registration Districts. They also superintend the work of the vaccination staff in the tálukás, municipalities and cantonments. They watch and report on outbreaks of epidemic disease, and whilst travelling through their districts on tour give advice on all sanitary defects which come under their notice in towns and villages.

Present organization.

316. In Western Gujarát there is a Superintendent of Vaccination who has no sanitary duties to perform.

It is manifestly undermanned and yet the Finance Committee proposed to abolish 2 Deputy Sanitary Commissioners.

317. From the very first creation of the Department, it became evident, and I brought to notice in the annual report for 1876, that it was undermanned, and that it was impossible for five men efficiently to superintend the sanitary wants of such vast areas and enormous populations, but it has actually been proposed by the Finance Committee to reduce this staff to three officers instead of five and thus to assimilate them to the number of Commissioners of Divisions. In stating my reasons to Government why three Deputy Sanitary Commissioners would not suffice for the Presidency proper, I said : " For years past my predecessor and I have lost no opportunity of bringing to the notice of Government that the areas in charge of each Deputy Sanitary Commissioner are so large that their number should be increased in order to maintain more effective supervision over their staff of vaccinators.

The Presidency proper is now divided for vaccination and registration purposes into the following districts :—

The Western Registration District comprises the Collectorates of Khándesh, Násik, Thána, Kolába, besides Native States. It covers a total area of 26,321 square miles and has a population of 3,493,821 persons. In other words, an area comprising about half the area of England and Wales and a population exceeding that of Scotland by about 42,000 persons.

The Central Registration District comprises the Collectorates of Ahmednagar, Poona, Sholápur, Sátára, Ratnágiri, which, including the Native States, cover an area of 30,252 square miles, or as nearly as possible the same area as Scotland (30,401 square miles). The population amounts to 4,858,709 persons, or nearly the population of Ireland (4,918,338).

The Southern Registration District comprises the Collectorates of Belgaum, Dhárwár, Bijápur, Kánara, Kolhápur, and Southern Marátha Jághirs, and has a population of 4,132,186 persons living on a area of 24,390 square miles.

The Eastern Gujarát Registration District comprises the Collectorates of Surat, Broach, Kaira, Panch Maháls, Ahmedabad, Mahi Kántha and Rewa Kántha. It covers 27,712 square miles and has a population of 4,162,314 persons.

The Province of Sind comprises the following Collectorates :—Karáchi, Hyderabad, Thar and Párkar, Shikárpur, and Upper Sind Frontier. It covers 48,014 square miles and has a population of 2,413,823 persons.

The above figures offer conclusive evidence that it is not possible consistently with efficiency to increase the areas entrusted to the Deputy Sanitary Commissioners, which are, as it is, so extensive that they cannot go all over them in one year. It must be remembered that the Commissioners of Divisions are not executive officers. They superintend the revenue and police work of the Collectors in their districts and no comparison between their work and that of Deputy Sanitary Commissioners is possible. The Deputy Sanitary Commissioner has to examine, as far as he possibly can, the work of each individual vaccinator employed in his districts."

The question is still *sub-judice*, but if such a retrograde policy is followed I should feel it to be my duty to recommend Government to abolish the Sanitary Department altogether as a farce and a sham and to only pay attention to vaccination which, I suppose, even the Finance Committee would not recommend to be done away with.

Increase in staff urgently needed.

318. Instead of any reduction being made in the number of the supervising staff of officers in the Sanitary Department, on the contrary an increase is most urgently required. The following statement shows the number of villages and vaccinators under the superintendence of each Deputy Sanitary Commissioner :—

Registration Districts.	Number of Villages.	Number of Vaccinators.
Western Registration District	7,379	71
Central do.	5,856	93
Southern do.	4,600	98
Eastern Gujarát do.	3,290	79
Sind do.	3,410	66

Number of villages and vaccinators much too large for efficient supervision.

319. How is it possible for any man to keep an effective supervision over such a number of villages? How can he examine the work of so many vaccinators? and yet the entire success of vaccination as a protective agent is dependent on the effective supervision of a responsible officer. The native Inspectors are not to be trusted to perform this work. They themselves require constant supervision, and the work of the vaccinators to be done efficiently (and if not done efficiently it is money thrown away) must be frequently examined and scrutinized by the officer to whom they look for promotion.

Health Officer for each zilla absolutely necessary.

320. When village sanitation is introduced, there must be maintained in each village a scavenging establishment, and it is absolutely essential that its work should receive as constant and strict a supervision as the work of the vaccinators. I, therefore, think that in each zilla it is absolutely necessary to have a Health Officer, who is as necessary an official as an Executive Engineer. I dare not, for financial reasons, propose that European Commissioned Medical Officers should be these Health Officers, though I should greatly prefer them, as from their early training in Great Britain they have acquired habits of observation and are quicker to notice any sanitary defects than a native of this country; but in the first place 24 medical officers could not be spared, and in the next place the amount of their pay would be so large as to render the proposal prohibitive: but our medical schools have trained up a very useful body of native gentlemen, who could, under proper supervision, undertake this work, and I, therefore, propose that in each of the 24 zillas there should be an Assistant Surgeon as Health Officer. He should be responsible for everything pertaining to health in his district. He should superintend the work of the vaccinators, whether cantonment, municipal or táluka, throughout the district. He should also inspect all dispensaries in the zilla and make arrangements to keep himself informed of the movement of disease. He should be in communication with every village in the district and compile in his office at head-quarters the registers of births and deaths received from each village in his charge. He should be on tour for at least eight months during the year. Even by constant travelling it would not be possible for him to visit every village in his district during the course of one year, as a reference to the number of villages in each Collectorate as given in the tables published in Section V. will show; but every village should be regularly inspected within 18 months, and he should, of course, proceed at once to a village on the outbreak of epidemic dissease. Under him and his subordinates should be placed all the cleansing establishments of the villages, and he would thus be responsible that the provisions of the Village Conservancy Act were carried out.

Who should work under 3 Divisional Sanitary Commissioners.

321. I would divide the Presidency proper into three divisions and over each place a European Commissioned Medical Officer, who should be responsible to the Sanitary Commissioner for the inspection of the work of the Health Officers. They should be constantly travelling and they should test the accuracy of the returns and note the localities of highest death-rate and advise the Sanitary Commissioner as to the necessity for special sanitary work. The Sanitary Commissioner would then be the head of a real instead of a sham department whose very name is misleading. In his office would be compiled the vital statistics for the Presidency and he would devote himself especially to the sanitation of the larger municipalities, leaving the Divisional Sanitary Com-

Duties of Sanitary Commissioner.

missioners to take charge of the smaller ones. The plans of all structural sanitary works and buildings prepared by Engineers, whether in the Military or Civil Departments, should be, as now, forwarded to him for opinion, and he would be still the sanitary adviser of Government in the Military as well as in the Civil Department.

Claims of the Sanitary Commissioners of Madras and Bombay for the appointment of Sanitary Commissioner with the Government of India should be considered.

322. I must also express my opinion that it is very hard that the Sanitary Commissioners of Madras and Bombay are not considered eligible for the appointment of Sanitary Commissioner with the Government of India, which is at present restricted to members of the Bengal Medical Service. I, therefore, earnestly hope that the claims of the Sanitary Commissioners of Madras and Bombay will be taken into consideration at the next vacancy.

An annual conference of the Sanitary Commissioners throughout India suggested.

323. I also suggest that it would be for the advancement of sanitary reform in India if the Sanitary Commissioners of the respective provinces were to meet annually in conference at the head-quarter station of each province in succession. At such conferences it would be most useful for them to compare notes and to discuss matters of a œtiological interest. Since I have been Sanitary Commissioner of Bombay I have received letters from Sanitary Commissioners of other provinces asking for information regarding the Bombay practice, and I believe much good would result from learning the procedure which was followed, and the difficulties met with, in other provinces and by reciprocating ideas on these subjects.

Need for sanitation in Native States.

324. I would also take this opportunity of inviting the attention of Government to the very urgent want of sanitation being introduced into the Native States throughout the Presidency as well as in our own districts, and it is especially desirable that a registration of births and deaths be introduced into them, so that the village registers, as in our districts, might be compiled in the offices of the Deputy Sanitary Commissioners. In present circumstances cholera may be raging in Native States situated in the heart of our Collectorates and the Deputy Sanitary Commissioners only casually hear of its existence.

Loss of revenue resulting from sickness and death.

325. The proposals I have made may perhaps appear to some persons to be Utopian and to entail a much greater expenditure than Government can legitimately be called upon to sanction. To all such I would point out that the present insanitary conditions in towns and villages exercise a very serious, if but little regarded, effect on the revenues of India; for in considering this question there must be taken into account the vast sums annually lost to the country from the extreme prevalence of sickness and from the premature deaths among the rising generation and among the bread-winners throughout the land. Such loss is not imaginary but real, and whether it falls in the first instance on the merchant owing to the lessened consumption of articles of food, clothing, &c., obtained from him, or on the employer of labour owing to the greater scarcity thereby caused in the supply of able-bodied men and women required for works of utility throughout the country, it eventually falls on Government in the shape of lessened revenue and increased difficulty in procuring recruits for its armies, &c.; and when, moreover, the annual loss which our commerce has to meet on account of the imposition of quarantine is calculated, it will be evident that the actual loss of money now entailed on the country by disease, the offspring of filth, far outbalances the expenditure, which would be required if Government were pleased to sanction the cost of the agency necessary to maintain cleanliness in our villages.

Results to be obtained.

326. If the Sanitary Department be organized in the manner I so strongly advocate, the results would be immediately perceived, for epidemics of cholera would at once lose their intensity, and, as the system became perfected, would gradually cease, whilst the severity of fevers and of other diseases would proportionately diminish, and the health of the people would be speedily and sensibly improved, and a stronger and more

robust generation would grow up. In fact, it is as certain as a mathematical problem that the present death-rate would at once be decreased by at least 25 or 30 per cent., and eventually by quite a half. Is not the attainment of such a result worth the expenditure of money?

Last word of advice.

327. I am loth to bring this report to a conclusion, lest I should have omitted any argument which would induce Government to take the action I have since 1870 repeatedly pressed on its notice, but I must do so now for it has attained too great a length; and on this the last day of my service the final word of adivce, which it is my privilege to offer to the Government I have served so long, shall be, the motto which I have always set before myself in my sanitary work—"Do what is right and fear not."

T. G. HEWLETT,
Deputy Surgeon-General,
Sanitary Commissioner.

12th May 1888.

APPENDIX I.

Sanitary Estimate of Villages and Towns in the Bombay Presidency inspected by the Deputy Sanitary Commissioners in 1887.

Collectorate.	Táluka.	Places inspected. Towns.	Places inspected. Villages.	Water.	Drainage.	Domestic Cleansing.
1	2	3	4	5	6	7
				Western Registration District.		
Khándesh.	Dhulia ...	1	...	From river and wells. A scheme is under consideration for a regular water-supply.	Surface drainage and cleanliness are carefully attended to.	The nightsoil is thrown on piece of ground south-east of the town.
	Amalner...	1	...	From wells and tanks ...	Underground and side drains.	Some 45 private privies cleaned by hand. Open spaces to south-west are marked by municipality to resort.
			5	From wells, nálás and rivers.	No drains ...	None. People go round the villages for calls of nature.
	Erandol ...	2	...	From nálás and wells ...	Underground and some road-side pucca drains.	Private privies cleaned by hand. Salt is thrown down in cesspits when necessary. People generally go round about the town for calls of nature.
	Chopda ..	1	...	River and wells... ...	Underground and pucca masonry drains.	Private privies cleaned by hand and cesspits cleaned when necessary.
	Sávda ...	3	...	Rivers, streams, wells and Khund or pools.	Some streets have pucca drains.	Do. do.
			2	Rivers	None ...	People resort chiefly to the river bank.
	Jalgaon ...	1	...	Tank and wells... ...	Side drains ...	Public latrines and private privies cleaned by bhangis.
	Jámner ...	1	...	River and wells... ...	None ...	Private privies cleaned by a bhangi.
Násik.	Chándor...	...	1	River and well	Cutcha drains ...	Some public latrines.
				Central Registration District.		
Ahmednagar.	Ráhuri ...	...	2	From river Pravara ...	.....	Surface cleanliness to be attended to and trench latrines established.
	Kopargaon	...	7	Step wells and "ads" ...	.....	Steps of wells to be closed and surface cleanliness attended to.
	Nevása ...	...	23	4 from rivers and the rest from wells and "nálás."	.....	Trench latrines to be dug and surface cleanliness carried out.
	Shevgaon..	...	4	3 from rivers and 1 from "ads."	.....	Do. do.
	Nagar ...	1	...	Troughs and pipes supplied by aqueducts.	Drainage imperfect.	Surface cleanliness to be attended to and trench latrines used.
		1	...	9 pipes	.....	Do. do.
		...	8	2 from rivers, 6 from "ads" and "nálás."	.....	Do. do.
	Párner ...	...	8	2 from rivers and the rest from "ads" and "nálás."	.....	Do. do.
	Shrígonda.	...	1	From river	.....	Do. do.
Poona.	Purandhar.	1	...	Karah river	No drainage; gutters clean.	Trench latrines to be used.
		1	...	Tank and wells... ...	.....	Surface cleanliness to be carried and trench latrines used.
		...	6	2 from rivers and the rest from step wells.	.....	Washing and bathing in the river above the village to be prohibited. Steps of wells to be closed.
	Sirúr ...	1	...	8 pipes, Ghodnadi river, and 2 wells.	.....	Surface cleanliness to be attended to and trench latrines used.

Sanitary Estimate of Villages and Towns in the Bombay Presidency inspected by the Deputy Sanitary Commissioners in 1887—continued.

Collectorate.	Táluka.	Places inspected. Towns.	Places inspected. Villages.	Water.	Drainage.	Domestic cleansing.
1	2	3	4	5	6	7
				Central Registration District—continued.		
Poona—*continued.*		1	...	From Vel river and 3 wells.	.....	Surface cleanliness to be attended to and trench latrines used.
		...	4	1 from river and 3 from wells.	.....	Do. do.
	Haveli ...	...	6	1 from river, 5 from "ads."	.....	Do. do.
	Bhimthadi.	1	...	Karah river	.....	Trench latrines to be dug. Washing in the river to be prohibited, surface cleanliness to be attended to.
		...	8	Do. do.	.....	Do. do.
	Mán ...	1	...	Tank and wells	.....	Protection of tank water from pollution by raising parapet wall.
		...	1	A step well	.....	Steps of well to be closed.
	Pátan ...	...	2	From rivers	.....	Surface cleanliness attended to, trench latrines used.
	Khánápur .	...	2	From "nálás"	.....	Do. do.
Sátára.	Karád ..	1	...	Krishna and Koyna rivers and 8 cisterns.	.....	Surface cleanliness attended to, prickly-pear to be cut down.
		...	11	9 from rivers, 1 from well and 1 from river and irrigated canal.	.....	Do. do.
	Khatáv ...	...	4	Step wells and "nálás".	.....	Do. do.
		1	...	"Nála" and 10 wells ...	.....	Trench latrines to be made.
	Koregaon..	1	...	2 "nálás" and 68 wells .	.....	Washing in nála above the town to be prohibited.
		...	7	Step wells and "nálás".	.....	Steps of wells to be closed.
	Sátára ...	...	4	2 from rivers and 2 from "ads."	.....	Trench latrines to be dug.
	Jávli ...	...	4	3 from rivers and 1 from wells.	.....	Do. do.
	Wái ...	...	2	From wells	.....	Do. do.
	Málsiras ..	...	16	1 from river, 9 from step wells and 6 from "nálás."	.....	Trench latrines to be made, prickly-pear in 6 villages to be removed.
Sholápur.	Pandharpur	1	...	Bhima river and tank, tank water impure.	.....	Water-supply to be improved, trench latrines to be used.
		...	3	"Nálás" and wells ...	.....	Surface cleanliness to be attended to.
	Sángola ...	...	1	"Nála"...	.....	Do. do.
	Mádha ...	...	3	2 from step wells and 1 from "nála."	.....	Do. do.
	Sholápur .	...	1	"Nála"	.....	Do. do.
				Southern Registration District.		
Belgaum.	Sampgaon .	1	...	From tank and wells ...	None	.....
	Kháuápur .	1	...	From wells and river ...	Natural and side gutters of cutcha masonry.	Some private privies and cesspits, but the people mostly go round about the town for calls of nature.
				Eastern Gujarát Registration District.		
Surat.	Chorási ...	...	1	From wells	No drains ...	Some private privies and cesspits, but the people mostly go round about the town for calls of nature.
	Bárdoli ...	1	...	From wells and river ...	Do.	Do. do.
		...	1	Do. do. ...	Do.	Do. do.
	Chikhli ...	...	1	From wells, tank and river.	Do.	Do. do.
Panch Mahals.	Godhra ...	...	1	From wells and tank ...	None	People go round about the village for calls of nature.
	Kálol ...	...	1	From wells	Do.	Some private privies. People generally go round about the village for calls of nature.

Sanitary Estimate of Villages and Towns in the Bombay Presidency inspected by the Deputy Sanitary Commissioners in 1887—concluded.

Collectorate.	Táluka.	Places inspected. Towns.	Places inspected. Villages.	Water.	Drainage.	Domestic cleansing.
1	2	3	4	5	6	7
				Eastern Gujarát Registration District—contd.		
Ahmedabad.	Dhandhuka	1	...	From river	None	Some private privies. People generally go round about the village for calls of nature.
				Sind Registration District.		
Karáchi.	Sehwan ...	1	...	From wells and canal ...	None	People go roundabout the town for calls of nature.
	Mirpur Sákro.	...	2	From wells	Do.	Do. do.
	Mirpur Batoro.	...	2	From canal and wells ...	.....	Do. do.
	Sujáwal ...	...	1	From tank and wells ...	None	Do. do.
	Jati ...	...	1	From kutcha wells, tank and canal.	Do.	Do. do.
	Ghorábári.	...	1	From the river Indus ...	.....	A few old wooden sentry like boxes do duty as latrines.
Hyderabad.	Hyderabad	1	...	From the Indus river ...	Surface drains ...	Municipal and private latrines cleansed by bhangis.
	Hála ...	...	2	From wells	None	Seven latrines.
	Tando Alahyar.	...	3	From wells and canals...	Do.	Latrines.
	Shahdádpur.	...	1	From wells	Do.	.....
	Mirpur Khás.	...	1	From wells and canals...	Do.	.....
	Moro ...	...	1	From wells	Do.	.....
	Sákrand ...	...	1	Do.	Do.	.....
Shikárpur.	Shikárpur.	...	2	From wells	None	.....
	Sukkur ...	...	1	Do.	Do.	.....
	Naushahro.	...	1	Do.	Do.	.....
	Rohri ...	1	...	From Indus river and wells.	Surface drainage ...	Seven latrines.
	Lárkhána .	...	1	From wells	None	.....

From Reports by Civil Surgeons.

Collectorate.	Number of Towns inspected.	Number of Inspection Reports.	Drinking Water.	Drainage.
Násik... ...	5	7	Obtained from rivers, wells, tanks and streams.	Natural and cutcha side drains to streets.
Thána ...	9	9	Do. from rivers, tanks and wells ...	Street side gutters.
Ahmednagar...	4	4	Do. from rivers and wells	Covered drains in the town of Sangamner,
Poona ...	10	20	Do. from rivers, tanks wells and cisterns or hauds and by pipes.	Some have side gutters and surface drains. About three-fourths of the Poona City is supplied with sewers and drains.
Sholápur ...	3	6	Do. from reservoir, rivers, tanks and wells.	Road-side drains, gutters and covered drains.
Sátára ...	3	3	Do. from rivers, canal and brook ...	Cutcha drains and surface drains.
Belgaum ...	6	7	Do. from acqueduct, rivers, tanks and wells.	Pucca masonry drains, gutters and covered drains.
Kánara ...	4	4	Do. from rivers and wells	Drains.
Surat	2	2	Do. from rivers, wells and underground tanks.	Side drains to streets in Surat City.
Broach ...	7	8	Do. from wells and tanks	None.
Karáchi ...	8	10	Do. from river, kutcha wells, tanks and canals.	Some have natural surface drainage, some have few drains and others have none.
Hyderabad ...	8	15	Do. from canals and wells	Surface and superficial drains.
Shikárpur ...	10	17	Do. from rivers and wells	Surface drain, sewers and superficial drains.

APPENDIX II.

Statement showing the Observations between the daily recorded Deaths from Cholera and the daily Meteorological Conditions at the undermentioned Towns during the outbreak in the year 1887.

Months and Date.		Cholera. Cases.	Cholera. Deaths.	Wind direction at 10 A.M.	Mean Velocity, miles per diem.	Temperature of Air in the Shade. Maximum.	Temperature of Air in the Shade. Minimum.	Temperature of Air in the Shade. Range.	Daily Air Moisture.	Rainfall.	Remarks.
				Malegaon.							
10	June 1887 ...	1	1	S.W. ...	200	94·9	73·8	21·1	59	0·14	
12	" ...	3	2	W.	339	91·7	74·8	16·9	59	...	
13	" ...	3	1	W.	307	91·5	75·4	16·1	63	0·05	
15	" ...	1	...	W.S.W. ...	170	87·4	72·6	14·8	82	2·78	
16	" ...	3	1	S.S.W. ...	234	83·7	72·4	11·3	85	0·27	
17	" ...	5	1	W.	357	88·0	72·7	15·3	74	0·02	
18	" ...	...	4	W.S.W. ..	297	87·8	73·1	14·7	64	...	
19	" ...	1	...	W.	284	82·9	73·7	9·2	70	0·06	
20	" ...	3	1	W.	246	88·2	73·1	15·1	64	...	
21	" ...	1	2	W.S.W. ...	241	89·7	73·2	16·5	63	...	
22	" ...	3	1	N.W. ...	271	93·0	74·1	18·9	54	...	
23	" ...	6	...	S.W. ...	236	94·9	73·0	21·9	53	...	
24	" ...	1	1	W.S.W. ...	170	94·6	73·1	21·5	52	...	
25	" ...	3	1	W.	192	86·5	74·6	11·9	70	0·31	
27	" ...	5	1	W.	178	87·9	72·7	15·2	67	0·10	
28	" ...	2	2	S.W. ...	142	92·7	71·2	21·5	62	0·01	
29	" ...	2	2	W.	164	81·4	71·3	10·1	84	0·73	
30	" ...	2	2	N.	133	86·7	72·2	14·5	70	0·32	
1	July 1887 ...	2	...	N.	134	89·5	71·4	18·1	64	...	
2	" ...	2	2	N.W. ...	207	89·4	72·5	16·9	66	0·10	
3	" ...	7	...	N.N.W. ...	144	88·7	75·1	13·6	71	...	
4	" ...	5	3	N.	145	81·7	73·2	8·5	84	1·51	
5	" ...	1	...	S.W. ...	198	83·6	73·3	10·3	76	...	
6	" ...	3	...	W.N.W. ...	284	84·7	73·7	11·0	73	0·04	
7	" ...	6	2	W.	221	85·1	73·4	11·7	76	0·05	
8	" ...	4	...	W.	280	85·7	72·3	13·4	80	0·30	
9	" ...	4	2	W.N.W. ...	375	81·6	73·4	8·2	77	0·01	
10	" ...	3	...	W.S.W. ...	338	78·3	72·1	6·2	83	0·50	
11	" ...	1	3	W.	413	77·8	72·4	5·4	85	0·14	
13	" ...	3	2	W.	510	85·1	73·5	11·6	72	...	
14	" ...	2	1	W.	391	78·4	72·3	6·1	82	...	
15	" ...	...	2	W.S.W. ...	423	76·3	71·7	4·6	90	0·85	
16	" ...	1	...	W.	258	78·3	68·5	9·8	84	0·69	
17	" ...	5	4	S.W. ...	284	84·7	71·3	13·4	73	0·03	
18	" ...	...	...	W.	247	94·4	70·7	23·7	73	...	
19	" ...	1	1	W.	242	83·9	70·5	13·4	81	...	
20	" ...	1	...	W.S.W. ...	241	83·4	69·7	13·7	71	...	
21	" ...	4	1	S.W. ...	262	82·2	72·1	10·1	78	0·12	
24	" ...	3	...	W.	212	81·0	72·1	8·9	83	0·52	
26	" ...	...	2	W.	310	80·1	71·5	8·6	84	0·25	
28	" ...	...	1	W.	365	82·9	72·3	10·6	78	...	
29	" ...	2	...	W.S.W. ...	314	81·4	71·7	9·7	79	0·01	
30	" ...	1	...	W.	374	82·7	72·1	10·6	80	...	
31	" ...	3	1	N.W. ...	338	84·9	71·7	13·2	64	...	
1	August 1887 ...	2	...	W.	396	83·2	72·4	10·8	71	...	
3	" ...	1	...	W.N.W. ...	294	81·1	72·2	8·9	74	0·13	
6	" ...	...	1	W.	259	85·9	71·2	14 7	67	...	
9	" ...	2	...	W.	333	83·7	71·8	11·9	72	0·00	
11	" ...	1	1	W.	193	79·0	71·9	7·1	86	1·17	
21	" ...	2	...	W.	196	83·9	70·4	13·5	76	0·01	
22	" ...	1	...	W.S.W. ...	185	83·1	71·3	11·8	82	0·06	
26	" ...	1	1	W.	259	85·1	70·5	14·6	69	0·00	
2	September 1887 .	3	...	W.N.W. ...	183	87·4	72·3	15·1	75	0·00	
3	" ...	...	1	W.S.W. ...	198	84·0	70·7	13·3	75	0·00	
4	" ...	1	...	S.W. ...	151	87·7	68·2	19·5	71	0·00	
5	" ...	1	...	E.	96	87·9	67·3	20·6	62	0·00	
21	December 1887...	10	4	E.	72	80·5	44·7	35·8	33	0·00	
22	" ...	...	1	S.S.E. ...	58	80·8	45·8	35·0	33	0·00	
23	" ...	1	2	E.	54	81·2	46·7	35·4	31	0·00	
24	" ...	1	...	E.	68	82·7	47·8	34·9	30	0·00	
25	" ...	...	1	E.N.E. ...	92	81·6	49·0	32·6	34	0·00	
26	" ...	1	...	E.	54	81·8	47·8	34·0	32	0·00	
27	" ...	1	...	S.E. ...	96	77·6	58·4	19·2	55	0·00	
28	" ...	1	...	E.	108	83·7	63·9	19·8	59	0·00	

Statement showing the Observations between the daily recorded Deaths from Cholera and the daily Meteorological Conditions at the undermentioned Towns during the outbreak in the year 1887—continued.

Months and Date.	Rainfall in Inches.	Temperature of Air in the Shade.			Moisture of Air per cent. 100 being Saturation		Wind.			Deaths from Cholera recorded on each day.
		Highest Maximum.	Lowest Minimum.	Range.	10 H.	16 H.	Direction. 10 H.	Direction. 16 H.	Velocity. Miles per diem	
				Bombay City.						
20th Feb. 1887...	...	86·5	72·1	14·4	68	68	N.E.	N.W.	174	1
9th March " ...	...	83·2	70·6	12·6	79	68	N.N.W.	N.W.	244	1
10th " " ...	...	83·1	71·4	11·7	80	74	W.S.W.	W.	171	2
15th April " ...	...	86·6	74·9	11·7	73	64	N.N.W.	N.W.	344	1
15th " " ...	...	88·6	76·0	12·6	73	75	W.N.W.	N.W.	319	1
24th " " ...	...	87·7	77·7	10·0	75	68	S.W.	W.N.W.	187	1
7th May " ...	...	89·7	77·8	11·9	71	66	S.	W.	260	1
10th June " ...	0·57	81·0	75·0	6·0	93	90	S.	S.	541	1
14th " " ...	2·49	83·2	76·4	6·8	90	85	W.S.W.	W.S.W.	354	1
22nd " " ...	...	86·7	79·2	7·5	77	76	W.S.W.	W.	348	1
25th " " ...	0·92	81·2	25·9	5·3	91	85	E.N.E.	W.N.W.	337	1
26th " " ...	0·49	81·9	75·8	6·1	86	92	W.	W.N.W.	311	1
27th " " ...	...	85·1	75·9	9·2	79	77	W.S.W.	W.	251	2
28th " " ...	0·25	85·7	77·8	7·9	83	77	W.	W.N.W.	304	1
29th " " ...	0·57	83·3	77·8	5·5	89	81	N.	W.	249	1
1st July " ...	...	87·1	78·6	8·5	79	76	W.S.W.	W.	196	2
3rd " " ...	7·04	80·7	75·0	5·7	91	90	W.	S.S.W.	199	2
6th " " ...	3·95	81·2	75·0	6·2	92	86	W.	W.S.W.	570	2
7th " " ...	1·37	83·1	75·5	7·6	85	89	W.S.W.	W.S.W	697	2
9th " " ...	0·77	84·1	75·6	8·5	85	91	W.S.W.	W.S.W.	619	1
10th " " ...	0·15	83·3	75·8	7·5	87	82	W.S.W.	W.S.W.	592	1
11th " " ...	0·87	80·6	75·9	4·7	85	87	W.S.W.	W.S.W.	591	1
12th " " ...	0·15	83·1	75·6	7·5	85	86	W.S.W.	W.S.W.	606	2
14th " " ...	0·20	82·2	77·8	4·4	86	85	W.S.W.	W.	612	2
15th " " ...	0·28	81·6	77·7	3·9	86	88	W.S.W.	W.S.W.	696	1
16th " " ...	0·02	82·6	77·1	5·5	88	84	S.W.	S.S.W.	570	3
17th " " ...	0·35	82·8	77·3	5·5	8[illegible]	85	S.	S.S.W.	564	2
19th " " ...	0·21	85·0	76·0	9·0	84	78	W.	W.	404	2
20th " " ...	0·13	84·8	77·6	7·2	85	82	W.S.W.	W.	465	2
21st " " ...	...	84·7	78·0	6·7	82	79	W.S.W.	W.S.W.	403	2
22nd " " ...	0·50	84·5	76·0	8·5	83	76	W.S.W.	W.S.W.	457	2
23rd " " ...	0·15	84·1	75·8	8·3	82	81	W.	W.	484	2
24th " " ...	0·78	81·0	74·9	6·1	92	85	W.	W.S.W.	548	2
25th " " ...	0·51	80·2	74·7	5·5	89	88	W.S.W.	W.S.W.	509	1
26th " " ...	0·58	80·0	75·2	4·8	89	88	W.S.W.	W.S.W.	447	1
27th " " ...	0·25	83·4	75·1	8·3	81	82	W.S.W.	W.S.W.	422	3
28th " " ...	0·23	84·1	77·0	7·1	82	85	W.S.W.	W.S.W.	473	2
29th " " ...	0·41	81·9	75·6	6·3	88	82	W.	W.S.W.	539	3
30th " " ...	...	84·8	76·7	8·1	81	79	W.S.W.	W.S.W.	458	2
31st " " ...	0·07	86·1	77·0	9·1	81	76	W.	W.S.W.	470	4
1st August " ...	0·01	84·1	77·8	6·3	80	80	W.S.W.	W.S.W.	488	2
2nd " " ...	0·92	81·8	75·0	6·8	91	87	W.	W.S.W.	528	4
3rd " " ...	1·07	81·4	76·0	5·4	87	93	W.S.W.	W.S.W.	509	4
4th " " ...	0·04	84·5	75·1	9·4	84	79	W.S.W.	W.	507	4
5th " " ...	0·22	83·3	76·0	7·3	87	79	W.	W.	380	4
6th " " ...	0·02	84·6	76·2	8·4	80	77	W.S.W.	W.S.W.	318	3
7th " " ...	0·22	85·4	76·8	8·6	79	81	W.S.W.	W.S.W.	255	5
8th " " ...	0·36	84·7	76·4	8·3	79	81	W.S.W.	W.S.W.	468	3
9th " " ...	0·02	84·6	77·2	7·4	76	75	W.S.W.	W.S.W.	441	4
10th " " ...	2·30	80·8	75·0	5·8	89	91	S.W.	W.S.W.	446	5
11th " " ...	1·90	77·4	73·8	3·6	91	87	W.S.W.	W.	409	4
12th " " ...	2·04	80·7	74·0	6·7	94	88	N.N.E.	S.	223	5
13th " " ...	0·68	83·8	75·1	8·7	89	81	W.N.E.	W.S.W.	238	2
14th " " ...	...	82·9	77·0	5·9	88	80	W.S.W.	W.N.W.	302	3
15th " " ...	0·09	84·1	77·3	6·8	86	77	W.N.W.	W.N.W.	245	2
16th " " ...	0·17	83·5	75·6	7·9	83	88	W.N.W.	W.	233	4
17th " " ...	0·63	80·9	74·9	6·0	91	81	S.S.W.	W.N.W.	230	2
18th " " ...	0·04	84·1	75·6	8·5	79	84	W.	W.N.W.	265	3
19th " " ...	0·04	84·9	76·4	8·5	80	72	W.	W.	231	4
20th " " ...	0·06	85·0	77·2	7·8	80	79	W.	W.S.W.	337	3
21st " " ...	0·28	84·9	75·7	9·2	79	78	W.	W.S.W.	359	3
22nd " " ...	0·57	84·3	75·0	9·3	88	79	W.	W.	450	4
23rd " " ...	0·24	83·5	76·9	6·6	86	83	S.W.	W.S.W.	370	2
24th " " ...	1·11	82·1	75·4	6·7	85	85	W.S.W.	W.N.W.	356	1
25th " " ...	...	84·5	75·0	9·5	80	81	W.S.W.	W.S.W.	390	2
26th " " ...	0·14	84·3	76·9	7·4	77	82	W.S.W.	W.S.W.	370	4

Statement showing the Observations between the daily recorded Deaths from Cholera and the daily Meteorological Conditions at the undermentioned Towns during the outbreak in the year 1887—continued.

Month and Date.	Rainfall in Inches.	Temperature of Air in the Shade.			Moisture of Air per cent. 100 being Saturation.		Wind.			Deaths from Cholera recorded on each day.
		Highest Maximum.	Lowest Minimum.	Range.	10 H.	16 H.	Direction. 10 H.	Direction. 16 H.	Velocity. Miles per diem.	
				Bombay City—*continued.*						
27th August 1887 ...	0·39	83·1	75·0	8·1	85	77	W.	W.N.W.	253	1
28th " " ...	0·35	83·4	75·8	7·6	85	77	W.	W.	373	3
29th " " ...	1·44	79·7	74·1	5·6	94	88	S.E.	N.	268	4
30th " " ...	0·48	82·5	74·8	7·7	88	80	W.S.E.	W.N.W.	193	2
31st " " ...	1·76	79·9	73·5	6·4	94	91	W.	W.N.W.	214	1
1st Sept. " ...	0·46	79·5	75·0	4·5	93	89	S.S.W.	W.N.W.	187	1
2nd " " ...	0·39	82·3	75·0	7·3	83	85	W.	W.	273	1
3rd " " ...	0·19	83·8	75·4	8·4	79	81	W.N.W.	W.	352	4
4th " " ...	0·14	84·6	76·6	8·0	80	79	W.	W.	291	1
5th " " ...	0·04	84·2	76·5	7·7	87	71	S.S.E.	W.N.W.	184	5
7th " " ...	0·45	84·1	76·5	7·6	85	82	N.	W.N.W.	225	2
8th " " ...	0·08	86·7	76·9	9·8	87	80	S.S.W.	N.W.	214	3
9th " " ...	2·98	81·2	76·0	5·2	91	92	W.N.W.	N.W.	466	2
10th " " ...	7·84	78·8	74·8	4·0	95	93	W.	N.W.	421	4
11th " " ...	3·68	80·3	74·7	5·6	97	88	N.W.	W.	336	1
12th " " ...	...	83·6	74·4	9·2	82	74	W.N.W.	W.N.W.	298	1
13th " " ...	...	84·3	75·3	9·0	78	73	W.	W.	212	3
14th " " ...	...	85·1	76·6	8·5	77	73	W.S.W.	W.	300	1
15th " " ...	...	85·2	77·0	8·2	75	75	W.	W.	363	3
16th " " ...	0·04	85·5	76·4	9·1	75	73	W.S.W.	W.	297	3
17th " " ...	...	85·3	76·0	9·3	77	70	W.S.W.	W.	270	1
18th " " ...	0·06	85·4	76·0	9·4	77	72	W.S.W.	W.N.W.	240	1
19th " " ...	0·01	84·5	76·5	8·0	73	73	W.N.W.	W.N.W.	275	2
21st " " ...	0·80	83·2	74·6	8·6	91	80	S.S.W.	S.	145	1
22nd " " ...	0·63	80·7	73·4	7·3	86	79	E.N.E.	N.W.	135	1
23rd " " ...	...	84·3	74·1	10·2	78	74	E.S.E.	W.N.W.	210	2
25th " " ...	0·12	81·3	76·0	5·3	84	75	N.W.	N.W.	188	1
26th " " ...	...	83·6	74·0	9·6	76	70	E.N.E.	N.W.	189	1
29th " " ...	0·10	81·4	73·9	7·5	90	80	W.N.W.	N.W.	180	2
30th " " ...	...	81·5	74·8	6·7	83	80	E.N.E.	N.N.W.	130	1
1st Oct. " ...	...	83·9	73·9	10·0	87	76	E.	N.W.	170	1
2nd " " ...	...	85·3	75·2	10·1	75	76	E.N.E.	N.W.	198	1
4th " " ...	...	84·1	75·7	8·4	83	77	N.	N.W.	222	1
9th " " ...	...	87·9	77·4	10·5	68	76	N.E.	N.W.	242	1
10th " " ...	0·13	90·1	77·7	12·4	56	73	E.N.E.	N.N.W.	248	1
11th " " ...	2·57	87·8	80·0	7·8	76	77	E.N.E.	N.W.	230	5
13th " " ...	...	86·1	75·0	11·1	76	75	N.W.	W.N.W.	147	1
14th " " ...	...	85·3	75·0	10·3	84	77	S.	W.	168	1
15th " " ...	...	84·5	75·6	8·9	80	74	S.S.E.	W.N.W.	170	1
17th " " ...	...	87·2	76·9	10·3	84	73	S.E.	W.N.W.	131	2
19th " " ...	...	87·8	78·5	9·3	74	81	N.E.	N.W.	218	3
20th " " ...	0·04	86·9	76·0	10·9	74	74	E.N.E.	N.W.	182	1
21st " " ...	...	88·6	76·8	11·8	73	70	E.	N.W.	210	6
23rd " " ...	...	91.1	77·8	13·3	59	60	E.N.E.	N.W.	252	1
24th " " ...	...	90.8	76·8	14·0	56	65	E.N.E.	N.W.	245	1
25th " " ...	...	88·9	76·0	12·9	58	63	E.N.E.	N.W.	252	2
26th " " ...	...	91·4	76·0	15·4	45	58	E.N.E.	W.N.W.	296	2
27th " " ...	...	92·1	76·7	15·4	44	63	E.N.E.	N.W.	340	2
28th " " ...	...	91·2	75·0	16·2	54	65	E.N.E.	N.N.W.	307	1
29th " " ...	...	89·9	75·0	14·9	52	62	E.N.E.	N.W.	279	1
31st " " ...	...	88·4	71·7	16·7	56	57	E.N.E.	N.W.	308	1
1st Nov. " ...	...	88·2	71·9	16·3	49	60	E.N.E.	N.W.	260	1
3rd " " ...	...	91·1	72·2	18·9	55	68	E.N.E.	N.W.	310	1
4th " " ...	...	89·8	74·8	15·0	59	67	E.N.E.	N.N.W.	349	1
11th " " ...	...	88·9	76·2	12·7	77	81	E.N.E.	W.N.W.	192	3
12th " " ...	...	87·6	78·2	9·4	78	81	E.S.E.	W.S.W.	201	1
13th " " ...	...	90·0	78·1	11·9	72	76	E.	W.N.W.	226	1
14th " " ...	...	89·5	76·9	12·6	70	76	E.N.E.	W.N.W.	224	1
15th " " ...	...	85·8	76·0	9·8	65	64	E.N.E.	N.W.	270	1
16th " " ...	...	86·7	74·0	12·7	71	61	E.	W.N.W.	156	1
19th " " ...	...	88·0	72·8	15·2	62	56	E.	N.W.	283	1
20th " " ...	...	89·5	73·9	15·6	56	62	E.N.E.	N.W.	328	1
22nd " " ...	...	88·9	74·7	14·2	53	69	E.N.E.	N.W.	261	1
24th " " ...	...	87·2	73·8	13·4	49	44	E.N.E.	N.N.E.	341	1
20th Dec. " ...	...	83·7	69·2	14·5	45	52	E.	W.N.W.	247	1
23rd " " ...	...	83·1	66·6	16·5	50	65	N.E.	N.W.	312	1

Statement showing the Observations between the daily recorded Deaths from Cholera and the daily Meteorological Conditions at the undermentioned Towns during the outbreak in the year 1887—continued.

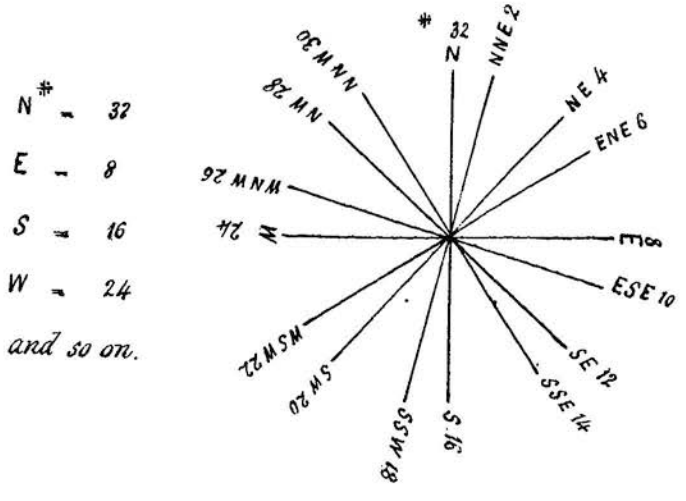
Months and Dates.	Rainfall in Inches.	Temperature of Air in the Shade.			Moisture of Air per cent. 100 being Saturation		Wind.			Deaths from Cholera recorded on each day.
		Highest Maximum.	Lowest Minimum.	Range.	10 H.	16 H.	Directions. 10 H.	Directions. 16 H.	Velocity. Miles per diem	
Poona.										
25th May 1887...	...	96·3	69·4	26·9	47	36	26	26	421·11	1
8th June " ...	...	86·0	71·6	14·4	62	73	12	20	169·6	1
19th " " ...	...	84·2	69·6	14·6	78	61	24	28	392·10	1
25th " " ...	...	88·0	71·3	16·7	72	71	22	26	340·5	1
29th " " ...	·06	79·5	70·5	9·0	78	69	26	24	351·6	1
3rd July " ...	...	84·2	72·6	11·6	66	63	22	24	327·6	1
5th " " ...	0·44	83·3	69·8	13·5	79	86	24	24	358·15	2
11th " " ...	0·28	75·4	69·4	6·0	88	92	26	24	582·12	3
12th " " ...	0·40	78·3	69·5	8·8	85	79	22	24	621·10	4
13th " " ...	0·03	79·5	70·4	9·1	78	76	24	26	839·20	1
15th " " ...	1·18	74·1	69·6	4·5	84	85	24	24	638·16	2
16th " " ...	0·80	77·5	68·0	9·5	75	73	22	20	534·17	2
17th " " ...	0·07	81·4	69·4	12·0	66	71	22	20	449·18	2
18th " " ...	...	81·9	68·9	13·0	71	66	24	24	472·15	3
19th " " ...	0·04	82·1	69·0	13·1	76	70	28	24	430·12	4
20th " " ...	...	81·3	68·7	12·6	73	82	24	24	402·9	7
21st " " ...	...	82·2	69·7	12·5	81	61	22	24	450·10	4
22nd " " ...	...	79·4	70·4	9·0	73	71	24	24	441·13	5
23rd " " ...	0·08	78·4	69·4	9·0	78	73	24	24	324·14	2
24th " " ...	0·60	76·4	69·1	7·3	88	87	26	24	440·11	3
25th " " ...	0·59	77·3	67·3	10·0	83	84	24	24	435·11	4
26th " " ...	0·08	75·3	69·4	5·9	88	86	22	22	440·11	7
27th " " ...	0·04	81·9	69·9	12·0	78	73	20	24	364·11	2
28th " " ...	0·03	81·4	69·7	11·7	72	67	22	24	496·15	2
29th " " ...	0·09	79·1	69·8	9·3	84	82	24	24	539·22	2
30th " " ...	0·18	80·8	68·8	12·0	82	78	24	24	454·16	6
31st " " ...	0·01	81·2	69·4	11·8	78	71	28	26	424·8	4
1st August " ...	0·04	80·6	69·4	11·2	69	74	24	24	420·9	1
2nd " " ...	0·29	76·6	68·8	7·8	92	92	28	24	380·9	8
3rd " " ...	0·38	77·4	68·6	8·8	88	94	24	24	276·8	6
4th " " ...	0·26	79·6	69·2	10·4	92	73	24	24	274·8	6
5th " " ...	0·04	80·6	68·8	11·8	78	70	24	24	330·7	9
6th " " ...	...	83·1	68·2	14·9	78	65	24	24	303·7	5
7th " " ...	·02	81·3	69·1	12·2	70	70	26	26	314·6	5
8th " " ...	·02	81·3	68·6	12·7	69	67	24	24	287·12	2
9th " " ...	...	80·5	68·8	11·7	75	72	26	24	410·9	1
10th " " ...	0·07	77·5	69·4	8·1	70	89	26	24	449·9	3
11th " " ...	0·39	74·0	68·4	5·6	91	87	24	22	306·4	3
12th " " ..	0·24	79·3	69·0	10·3	87	75	24	22	186·2	3
13th " " ...	0·01	83·2	69·3	13·9	76	73	28	24	207·4	1
14th " " ...	...	82·5	69·0	13·5	78	70	28	26	281·5	1
15th " " ...	...	82·7	67·5	15·2	76	70	26	24	241·4	1
16th " " ...	...	78·1	69·4	8·7	84	72	26	26	279·5	1
18th " " ...	·02	83·7	68·6	15·1	82	69	28	24	228·5	2
20th " " ...	...	81·4	68·7	12·7	68	69	24	26	332·12	1
23rd " " ...	0·05	81·1	67·8	13·3	76	78	24	24	320·9	1
28th " " ...	0·06	81·7	68·8	12·9	74	76	26	24	301·10	2
29th " " ...	0·03	81·4	68·7	12·7	77	70	24	24	318·9	1
31st " " ...	0·02	80·0	70·4	9·6	75	75	22	22	274·8	4
2nd Sept. " ...	0·04	83·2	69·7	13·5	71	76	26	26	298·10	4
3rd " " ...	0·03	80·4	69·4	11·0	73	86	24	24	284·8	1
4th " " ...	0·05	81·0	68·6	12·4	73	64	24	26	292·14	3
7th " " ...	·97	84·4	67·7	16·7	75	80	26	28	223·5	4
9th " " ...	1·66	81·2	70·3	10·9	94	81	22	26	167·2	1
11th " " ...	0·49	76·5	67·6	8·9	83	87	28	24	311·7	1
13th " " ...	...	82·3	66·9	15·4	70	66	20	20	408·10	1
15th " " ...	...	81·0	68·6	12·4	61	67	24	22	513·12	1
22nd Sept. " ...	...	85·9	67·6	18·3	62	59	22	24	237·1	1
25th " " ...	...	84·3	65·2	19·1	62	60	24	22	201·4	1
30th " " ...	0·03	81·7	66·3	15·4	87	61	24	28	199·1	1
2nd Oct. " ...	0·22	80·2	70·5	9·7	88	70	28	8	97·3	1
8th " " ...	...	91·8	68·3	23·5	36	27	4	4	93·2	1
15th Nov. " ...	...	86·1	62·1	24·0	47	28	4	4	128·2	7
17th " " ...	...	84·4	56·2	28·2	35	22	4	2	79·2	4
18th " " ...	...	84·5	54·4	30·1	34	26	6	4	66·2	3

Statement showing the Observations between the daily recorded Deaths from Cholera and the daily Meteorological Conditions at the undermentioned Towns during the outbreak in the year 1887—continued.

Months and Dates.	Rainfall in Inches.	Temperature of Air in the Shade.			Moisture of Air per cent. 100 being Saturation.		Wind.			Deaths from Cholera recorded on each day.
		Highest Maximum.	Lowest Minimum.	Range.	10 H.	16 H.	Direction. 10 H.	Direction. 16 H.	Velocity Miles per diem.	
				Poona—*continued.*						
19th Nov. 1887...	...	84·9	54·0	30·9	34	29	8	4	115·6	3
20th „ „ ...	...	85·0	54·6	30·4	38	35	6	8	147·5	1
21st „ „ ...	...	86·0	61·2	24·8	47	40	6	4	168·4	4
23rd „ „ ...	...	83·3	64·7	18·6	32	31	8	6	208·8	1
18th Dec. „ ...	...	80·8	50·9	29·9	29	22	10	8	210·11	15
20th „ „ ...	...	78·9	47·5	31·4	21	16	10	6	157·5	27
21st „ „ ...	...	79·8	45·5	34·3	24	14	10	6	127·3	19
22nd „ „ ...	...	81·7	45·4	36·3	20	14	8	6	130·3	11
23rd „ „ ...	...	84·1	51·8	32·3	24	27	8	8	151·5	9
24th „ „ ...	...	81·9	50·0	31·9	23	20	8	4	142·5	8
25th „ „ ...	...	82·0	52·4	29·6	28	21	6	4	156·5	4
26th „ „ ...	...	83·3	48·5	34·8	33	27	8	8	173·8	6
27th „ „ ...	...	78·2	66·7	11·5	67	59	10	10	303·5	6
28th „ „ ...	...	79·0	64·7	14·3	66	56	12	6	331·10	5
29th „ „ ...	...	84·7	61·0	23·7	51	45	10	12	193·5	4
30th „ „ ...	0·16	79·7	67·7	12·0	72	69	8	12	124·4	8
31st „ „ ...	...	81·4	66·7	14·7	60	46	6	6	116·5	4
				Shola'pur.						
6rd May 1887 ...	...	100·5	84·5	16·0	39	19	W.	W.N.W.	184·06	1
5th „ „ ...	0·20	98·0	73·8	24·2	50	47	W.	W.S.W.	141·38	1
9th „ „ ...	...	98·0	79·5	18·5	45	26	W.S.W.	W.	90·16	1
16th „ „ ...	...	99·0	82·9	16·1	37	26	E.N.E	W.	111·42	2
17th „ „ ...	...	101·8	84·6	17·2	36	26	N.W.	W.	112·02	1
20th „ „ ...	...	99·2	79·2	20·0	46	30	W.	W.N.W.	109·03	1
23rd „ „ ...	0·07	99·4	79·8	19·6	46	28	W.S.W.	W.N.W.	134·95	1
26th „ „ ...	Observer was	on sick	leave		...	...	...	...	...	2
27th „ „ ...					...	...	...	...	...	1
29th „ „ ...	...	99·3	79·9	19·4	46	32	W.S.W.	N.W.	140·12	1
31st „ „ ...	Observer was	on sick	leave		...	...	...	...	...	2
2nd June „ ...	...	94·7	80·6	14·1	47	29	W.N.W.	N.W.	131·60	2
4th „ „ ...	0·54	94·4	76·8	17·6	46	57	W.S.W.	S.S.W.	105·11	3
6th „ „ ...	...	88·7	76·4	12·3	59	52	S.S.E.	S.E.	120·13	1
8th „ „ ...	...	...	..	...	48	48	...	...	...	...
10th „ „ ...	...	89·8	76·5	13·3	58	41	W.S.W.	S.W.	157·41	2
11th „ „ ...	...	88·5	74·4	14·1	53	46	N.N.W.	W.N.W.	174·73	2
12th „ „ ...	..	88·9	76·3	12·6	52	42	W.N.W.	N.W.	191·12	1
14th „ „ ...	0·08	83·1	73·0	10·1	67	57	W.S.W.	S.W.	192·57	3
16th „ „ ...	...	86·9	75·5	11·4	54	66	S.W.	W.S.W.	198·06	1
17th „ „ ...	...	91·4	75·0	16·4	50	33	W.	W.N.W.	135·69	2
18th „ „ ...	...	91·8	77·6	14·2	50	38	W.N.W.	W.	173·00	2
19th „ „ ...	...	89·9	76·8	13·1	51	38	W.N.W.	W.	149·78	2
20th „ „ ...	...	90·3	76·9	13·4	51	45	W.S.W.	S.W.	157·18	2
21st „ „ ...	...	91·0	75·3	15·7	52	47	W.	W.S.W.	102·54	4
22nd „ „ ...	...	90·4	75·3	15·1	54	38	W.	C.	108·99	7
23rd „ „ ...	...	92·3	79·0	13·3	46	43	W.N.W.	W.	101·88	2
24th „ „ ...	...	88·3	76·6	11·7	61	46	W.	N.N.W.	105·53	4
25th „ „ ...	...	87·6	74·6	13·0	65	76	W.N.W.	W.	109·39	1
26th „ „ ...	0·63	86·0	70·1	15·9	71	88	W.	W.N.W.	99·05	4
27th „ „ ...	0·23	88·6	75·2	13·4	66	38	W.N.W.	W.	120·26	7
28th „ „ ...	...	91·0	76·7	14·3	58	42	W.N.W.	W.N.W.	113·00	4
29th „ „ ...	0·06	84·7	74·4	10·3	80	61	N.W.	N.W.	107·96	3
30th „ „ ...	0·03	89·2	75·1	14·1	59	44	W.	W.S.W.	124·52	2
1st July „ ...	0·02	91·4	77·1	14·3	56	35	W.N.W.	N.W.	120·64	1
2nd „ „ ...	0·36	85·7	72·3	13·4	84	71	W.	W.N.W.	123·04	4
3rd „ „ ...	...	84·6	73·6	11·0	75	76	W.N.W.	S.W.	131·60	3
4th „ „ ...	2·13	80·2	73·3	6·9	81	89	N.W.	W.S.W.	117·90	5
5th „ „ ...	0·18	83·5	72·7	10·8	79	61	W.	W.S.W.	105·11	6
6th „ „ ...	0·23	80·8	72·3	8·5	80	74	W.S.W.	S.W.	122·37	3
8th „ „ ...	...	84·8	74·8	10·0	66	62	W.S.W.	S.W.	119·30	4
9th „ „ ...	...	85·8	74·2	11·6	62	63	W.	W.S.W.	133·47	5
10th „ „ ...	0·10	82·6	71·3	11·3	63	70	W.	W.S.W.	127·21	8
11th „ „ ...	0·27	75·0	70·4	4·6	88	90	W.S.W.	W.	157·41	5
12th „ „ ...	0·51	79·3	71·4	7·9	81	69	W.N.W.	W.S.W.	174·33	11
13th „ „ ...	...	85·2	73·8	11·4	65	56	W.N.W.	W.	191·12	5

Statement showing the Observations between the daily recorded Deaths from Cholera and the daily Meteorological Conditions at the undermentioned Towns during the outbreak in the year 1887—continued.

Months and Dates.	Rainfall in Inches.	Temperature of Air in the Shade.			Moisture of Air per cent. 100 being Saturation.		Wind.			Deaths from Cholera recorded on each day.
		Highest Maximum.	Lowest Minimum.	Range.	10 H.	16 H.	Directions. 10 H.	Directions. 16 H.	Velocity Miles per diem.	
				Shola'pur—*continued.*						
14th July 1887 ...	...	82·3	72·1	10·2	64	74	W.S.W.	W.S.W.	147·59	11
15th " " ...	0·57	79·4	71·8	7·6	83	76	S.S.W.	W.S.W.	192·57	11
16th " " ...	...	85·4	73·8	11·6	63	53	W.	W.	248·13	7
17th " " ...	...	87·7	74·0	13·7	57	45	W.S.W.	W.S.W.	198·06	10
18th " " ...	...	87·2	74·1	13·1	59	42	W.N.W.	W.N.W.	135·69	8
19th " " ...	...	87·8	74·2	13·6	66	49	W.	W.S.W.	173·00	8
20th " " ...	...	86·4	73·8	12·6	68	48	W.	N.W.	157·18	10
21st " " ...	...	87·5	75·4	12·1	57	45	W.S.W.	W.	149·78	7
22nd " " ...	0·10	84·4	71·0	13·4	56	49	W.N.W.	W.N.W.	102·59	6
23rd " " ...	...	85·7	74·8	10·9	62	54	W.	W.N.W.	108·99	8
24th " " ...	0·52	84·2	71·7	12·5	62	84	N.W.	W.S.W.	101·88	6
25th " " ...	0·16	82·1	74·2	7·9	76	65	W.N.W.	W.	105·33	4
26th " " ...	...	85·6	74·6	11·0	60	58	W.	W.N.W.	109·57	6
27th " " ...	...	89·9	70·6	19·3	52	41	W.	W.N.W.	120·86	5
30th " " ...	...	88·7	75·4	13·3	53	45	W.	W.S.W.	107·96	2
31st " " ...	...	88·0	74·3	13·7	51	47	W.N.W.	W.	116·23	4
1st August " ...	0·12	87·9	73·7	14·2	52	62	W.S.W.	W.	205·35	1
3rd " " ...	...	88·0	73·8	14·2	50	68	W.N.W.	S.W.	207·10	3
5th " " ...	...	87·2	74·4	12·8	65	51	W.N.W.	W.S.W.	161·91	2
6th " " ...	...	85·4	76·3	9·1	62	56	W.	W.S.W.	140·68	1
7th " " ...	0·90	83·3	71·7	11·6	77	80	W.N.W.	S.S.W.	121·93	1
				Ratna'giri.						
8th Sept. 1887 ...	...	...	...	...	88	91	...	...	...	1
9th " " ...	...	...	...	...	95	94	...	...	...	1
10th " " ...	...	...	...	...	95	95	...	...	...	1
11th " " ...	...	...	...	...	94	91	...	...	...	1
15th " " ...	...	...	...	...	79	87	...	...	...	1
18th " " ...	...	...	...	...	76	74	...	...	...	1



Statement showing the Observations between the daily recorded Deaths from Cholera and the daily Meteorological Conditions at the undermentioned Towns during the outbreak in the year 1887—concluded.

Dates.	Attacks.	Deaths.	Mean of delay Maximum.	Range.	Mean of daily Maximum.	Wind direction. Morning.	Wind direction. Evening.	Mean of daily Velocity per day.	Rainfall, Inches.	Mean daily Air Moisture.	Remarks.
					Belgaum.						
15th Oct. 1887 ...	1	1	64·2	15·9	80·1	Calm.	Calm.	174	...	77	
16th " " ...	1	1	67·0	15·0	82·0	Calm.	N.N.E.	128	1·32	87	
19th " " ...	1	...	64·9	17·7	82·6	S.E.	Calm.	101	...	66	
20th " " ...	5	2	63·6	19·3	82·9	E.N.E.	E.N.E.	221	...	52	
21st " " ...	2	...	62·9	20·1	83·0	E.N.E.	E.N.E.	325	...	57	
22nd " " ...	2	...	65·4	15·6	81·0	E.	E.N.E.	311	·56	72	
23rd " " ...	2	1	65·0	15·0	80·0	E.N.E.	N.E.	286	·33	85	
24th " " ...	1	2	64·8	15·6	80·4	E.N.E.	Calm.	209	·11	83	
25th " " ...	...	3	65·4	14·0	79·4	E.	N.N.E.	244	·45	91	
26th " " ...	1	1	66·6	12·3	78·9	E.N.E.	N.N.E.	371	·53	87	
28th " " ...	2	1	67·1	10·8	77·9	E.N.E.	E.N.E.	373	·13	78	
29th " " ...	1	...	66·5	12·6	79·1	E.N.E.	E.N.E.	335	...	81	
30th " " ...	...	1	63·0	14·0	77·0	E.N.E.	E.N.E.	253	·01	69	
31st " " ...	1	...	59·8	16·4	76·2	N.N.E.	N.N.E.	226	...	60	
1st Nov. " ...	2	1	62·8	16·6	79·4	N.E.	N.N.E.	233	...	60	
2nd " " ...	2	2	66·0	15·5	81·5	E.N.E.	N.N.E.	248	...	65	
3rd " " ...	1	1	68·1	14·5	82·6	N.E.	N.E.	219	...	65	
4th " " ...	2	...	68·0	7·6	75·6	E.N.E.	Calm.	237	·57	92	
6th " " ...	1	...	66·6	12·0	78·6	S.E.	W.N.W.	156	1·57	89	
7th " " ...	...	2	67·0	11·2	78·2	E.L.E.	S.E.	248	·06	79	

Period.	No. of Cholera Cases. Cholera Cases.	No. of Cholera Cases. Colera deaths.	Rainfall in Inches.	Temperature of Air. Mean of daily maximum.	Temperature of Air. Mean of daily minimum.	Temperature of Air. Range.	Wind. Direction.	Wind. Mean Velocity, miles per hour.
				Surat.				
3rd August 1887 ...	1	1	0·57	82·0	75·9	6·1	S. W.	No instrument.
18th September " ...	1	1	0·00	87·7	79·4	8·3	S. W., W. N. W.	
23rd " " ...	1	1	0·00	88·1	78·7	9·4	S. W., N. S.	
5th October " ...	1	1	0·00	89·3	79·6	9·7	W. N. E.	
6th " " ...	2	1	0·00	91·9	81.0	10·9	W. N. W. E. N. E.	
9th " " ...	1	1	0·00	96·9	83·7	13·2	N. E., E. N. E.	
17th " " ...	1	1	0·00	93·6	76·0	17·6	N. E., E. N. E.	
19th " " ...	2	1	0·00	94·5	76·3	18·2	N. E.	
3rd December " ...	2	2	0·00	83·7	65·6	18·1	E. E. N. E.	
5th " " ...	...	...	0·00	84·2	65·8	18·4	E. N. E.	
7th " " ...	3	...	0·00	84·5	66·5	18·0	E. N. E.	
9th " " ...	...	1	0·00	87·2	69·1	18·1	E. N. E. N. E.	
10th " " ...	1	1	0·00	No observations from 10th to 14th December 1887.				
11th " " ...	1	1	0·00					
12th " " ...	3	3	0·00					
13th " " ...	3	3	0·00					
14th " " ...	1	...	0·00					
15th " " ...	3	2	0·00	83·9	66·0	17·9	E. N. E.	
16th " " ...	4	4	0·00	83·5	66·8	16·7	N. E. E.	
17th " " ...	1	1	0·00	84·5	65·2	19·3	W. S. W. S. W.	
18th " " ...	5	5	0·00	84·9	63·0	21·9	S. W. S. W.	
19th " " ...	3	1	0·00	84·8	69·1	15·7	W. N. W. W. N. W.	
21st " " ...	1	1	0·00	88·1	64·6	23·5	S. S. E. W. S. W.	
22nd " " ...	11	3	0·00	81·6	64 6	17·0	W. N. W. N. N. W.	
23rd " " ...	3	4	0·00	83·2	67·1	16·1	N. N. E. N. N. E.	
25th " " ...	8	5	0·00	84·4	54 7	2·97	S. S. W., N. N. W.	
26th " " ...	4	1	0·00	84·7	63 8	20·9	N. N. E S. S. W.	
27th " " ...	1	...	0·00	84·7	63·6	21·1	S. S. W. S. S. E.	
28th " " ...	2	2	0·00	86·9	55·0	31·9	S. S. E. N. N. W.	
29th " " ...	5	3	0·00	91 3	53·9	37·4	N. N. W. N. W.	
30th " " ...	3	...	0·16	82·9	56·4	26·5	S. S. E. S. W.	
31st " " ...	5	4	0·00	82·2	55·0	27·2	N. N. W. N. W.	

APPENDIX III.

GENERAL POPULATION AND VITAL STATISTICS.

ANNUAL FORM NO. I.—BIRTHS *registered in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1887.*

1	2	3	4			5			6	7	8
No.	Districts.	Population according to Census of 1881.	Number of Births registered.			Ratio of Births per 1,000 of Population.			Number of Males born to every 100 Females born.	Excess of Births over Deaths per 1,000 of Population.	Excess of Deaths over Births per 1,000 of Population.
			Male.	Female.	Total.	Male.	Female.	Total.			
	Western Registration District.										
1	Khándesh	1,237,231	26,145	24,462	50,607	21·13	19·77	40·90	106·88	2·77	....
2	Násik	781,206	16,190	15,243	31,433	20·72	19·51	40·23	106·21	9·01	....
3	Thána	807,367	13,148	12,495	25,643	16·29	15·47	31·76	103·23	7·85	....
4	City of Bombay	773,196	7,864	7,302	15,166	10·17	9·44	19·61	107·70	....	6.58
5	Kolába..	482,880	8,129	7,394	15,523	16·84	15·31	32·15	109·94	10·43	....
	Central Registration District.										
6	Ahmednagar	751,223	19,390	17,889	37,279	25·81	23·81	49·62	108·39	14·66	....
7	Poona	900,621	18,681	17,260	35,941	20·74	19·17	39.91	108·23	9·78	....
8	Sholápur	582,487	14,943	14,138	29,081	25·65	24·27	49·93	105·69	18·11	....
9	Sátára	1,062,360	24,807	23,397	48,204	22·35	22·02	45·37	106·03	9.65	....
10	Ratnágiri	997,090	14,550	13,448	27,998	14·59	13·49	28·08	108·19	11·70	....
	Southern Registration District.										
11	Belgaum	864,014	19,864	18,879	38,743	22·99	21·85	44·84	105·22	18·01	....
12	Dhárwár	882,997	21,801	20,672	42,473	24·69	23·41	48·10	105·46	19·98	....
13	Bijápur	638,493	16,770	16,377	33,147	26·26	25·65	51·91	102·40	23·82	....
14	Kánara	421,840	6,846	6,526	13,372	16·23	15·41	31·70	104·90	4·79	....
	Eastern Gujarát Registration District.										
15	Surat	614,198	13,110	12,627	25,737	21·34	20·56	41·90	103·82	11·77	....
16	Broach	326,930	6,547	5,999	12,546	20·03	18·34	38·37	109·13	....	1·13
17	Kaira	804,800	16,295	14,635	30,930	20·25	18·18	38.43	111·34	7·03	....
18	Panch Mahále	255,479	4,750	4,294	9,044	18·59	16·81	35·40	110·61	6·64	....
19	Ahmedabad	856,324	16,581	15,079	31,660	19·36	17.61	36·97	109·96	7·77	....
	Sind Registration District.										
20	Karáchi	478,688	7,611	6,329	13,940	15·90	13·22	29·12	120·26	11·83	....
21	Hyderabad	754,624	11,764	9,024	20,788	15·59	11·96	27·55	130·36	11·69	....
22	Thar and Párkar	203,344	4,239	3,431	7,670	20·85	16·87	37·72	123·55	21·06	....
23	Shikárpur	852,980	15,800	12,492	28,292	18·52	14·65	33·17	126·48	16·50	....
24	Upper Sind Frontier	124,181	1,675	1,301	2,976	13·49	10·48	23·97	128·75	12·11	....
	Total for the Presidency ..	16,454,414	327,500	300,693	628,193	19·90	18·27	38·18	108.91	11·51	....

ANNUAL FORM NO. II—DEATHS *registered in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1887.*

1	2	3	4	5			6	7			8		
No.	Districts.	Area in Square Miles.	Average Population per Square Mile.	Number of Deaths registered.			Number of Males died to every 100 Deaths of Females.	Ratio of Deaths per 1,000 of Population.			Mean Ratio of Deaths per 1,000 during previous five years.		
				Male.	Female.	Total.		Male.	Female.	Total.	Male.	Female.	Total.
	Western Registration District.												
1	Khándesh	9,944	124·42	24,682	22,490	47,172	109·75	39·02	37·19	38·18	29·72	27·61	28·69
2	Násik	5,940	131·51	12,827	11,562	24,389	110 94	32·28	30·12	31·22	31·34	29·36	30·37
3	Thána	3,936	205·12	9,989	9,319	19,308	107·19	28·99	23·82	28·91	25·41	25·12	25·27
4	City of Bombay	22	35,145·27	10,600	9,652	20,252	109·82	22·81	21·29	26·19	24·08	23·19	27·71
5	Kolába..	1,811	266·61	5,413	5,051	10,464	107·27	22·18	21·15	21·67	20·33	18·63	19·49
	Central Registration District.												
6	Ahmednagar	6,666	112·69	13,947	12,317	26,264	113·23	36·55	33·32	34·96	29·80	27·83	28·86
7	Poona	5,348	168·40	14,142	12,996	27,138	108·82	31·07	29·17	30·13	25·92	24·27	25·11
8	Sholápur	4,521	128·84	10,512	9,769	20,281	107·61	35·66	33·96	34·82	27·73	25·93	26·84
9	Sátára	4,958	212·98	19,366	18,605	37,971	104·09	36·37	35·12	35·74	26·92	26·21	26·56
10	Ratnágiri	3,922	254·22	8,432	7,902	16,334	106·71	17·82	16·08	16·95	17·50	14·04	15·69
	Southern Registration District.												
11	Belgaum	4,657	185·53	11,950	11,231	23,181	106·40	27·50	26·15	26·83	27·69	26·75	27·23
12	Dhárwár	4,535	194·63	12,592	12,243	24,835	102·85	26·15	27·76	28·12	29·26	28·52	28·89
13	Bijápur	5,757	110·99	9,017	8,920	17,937	101·09	28·39	27·79	28·09	24·36	23·39	23·83
14	Kánara	3,911	107·85	6,050	5,304	11,354	114·06	23·78	26·68	26·91	28·45	28·61	28·52
	Eastern Gujarát Registration District.												
15	Surat	1,662	369·55	9,390	9,120	18,510	102·96	30·68	29·53	30·13	28·92	27·29	28·10
16	Broach..	1,443	225·00	6,872	6,042	12,914	113·73	40·78	38·13	39·50	31·66	29·51	30·62
17	Kaira	1,609	500·18	13,657	11,617	25,274	117·56	32·00	30·73	31·40	28·20	27·36	27·80
18	Panch Mahále	1,613	158·38	3,761	3,587	7,348	104·85	28·67	28·85	28·76	18·0	17·43	18·39
19	Ahmedabad	3,821	224·10	13,339	11,669	25,008	114·31	30·35	27·98	29·20	29·04	26·51	27·81
	Sind Registration District.												
20	Karáchi	14,115	33·91	4,531	3,747	8,278	120·92	17·35	17·62	17·29	19·35	18·88	19·14
21	Hyderabad	9,030	83·57	6,586	5,385	11,971	122 30	16·17	15·50	15·84	17·55	15·93	16·80
22	Thar and Párkar	12,729	15·98	1,889	1,498	3,387	126·10	16·81	16·47	16·64	17·00	15·88	16·50
23	Shikárpur	10,001	85·29	7,963	6,255	14,218	127·31	17·27	15·96	16·67	18·33	17·52	17·96
24	Upper Sind Frontier	2,139	58·05	851	622	1,473	136·82	12·13	11·62	11·86	12·73	12·36	12·57
	Total for the Presidency ..	1,24,130	132·58	2,38,358	2,16,903	4,55,261	109·89	28·05	27·26	27·67	25·10	24·14	25·43

N.B.—Those born dead are not included in this or any of the other statements.

ANNUAL FORM No. III.—DEATHS *registered in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the month of the year 1887.*

1	2	3												4	5
No.	Districts.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total Deaths registered during the year.	No.
	Western Registration District.														
1	Khándesh	2,730	2,881	3,661	4,456	4,435	4,632	4,280	6,124	4,489	3,175	3,216	3,094	47,172	1
2	Násik	1,470	1,315	1,424	1,610	1,797	2,161	2,682	3,122	2,734	2,174	2,011	1,889	24,389	2
3	Thána	1,785	1,788	1,599	1,504	1,512	1,291	1,315	1,740	1,615	1,589	1,696	1,874	19,308	3
4	City of Bombay.. ..	1,692	1,580	1,689	1,639	1,718	1,510	1,641	2,001	1,773	1,750	1,571	1,688	20,252	4
5	Kolába	932	947	889	939	902	754	684	886	971	747	786	1,047	10,464	5
	Central Registration District.														
6	Ahmednagar	1,496	1,293	1,167	1,249	1,419	2,974	4,291	3,543	3,072	2,401	1,742	1,707	26,254	6
7	Poona	1,658	1,387	1,372	1,588	1,753	2,153	3,274	3,450	3,271	2,735	2,350	2,129	27,138	7
8	Sholápur	1,090	954	890	1,064	1,689	2,416	3,143	2,259	2,187	1,835	1,471	1,253	20,241	8
9	Satára	2,126	1,733	1,824	2,082	3,547	5,520	5,605	4,431	3,193	2,817	2,584	2,509	37,971	9
10	Ratnagiri	1,475	1,401	1,471	1,333	1,191	1,183	1,331	1,590	1,872	1,208	1,241	1,538	16,334	10
	Southern Registration District.														
11	Belgaum	1,[illegible]48	1,493	1,574	1,719	1,953	2,176	2,435	2,367	2,140	1,875	1,816	1,985	23,181	11
12	Dhárwár	2,285	2,197	2,071	2,064	2,048	2,020	2,116	2,128	2,003	1,834	1,843	2,246	24,835	12
13	Bijápur	1,100	937	965	952	999	1,630	2,156	2,689	2,467	1,952	1,299	1,291	17,937	13
14	Kánara	1,239	1,144	1,090	871	862	911	839	840	892	886	837	1,023	11,554	14
	Eastern Gujarát Registration District.														
15	Surat	1,466	1,334	1,377	1,365	1,360	1,424	1,373	1,771	1,942	1,493	1,750	1,855	18,510	15
16	Broach	859	838	990	961	959	780	799	1,056	1,285	1,502	1,685	1,200	12,914	16
17	Kaira	1,495	1,523	1,891	2,027	1,703	1,598	1,539	1,849	2,285	3,569	3,471	2,396	25,274	17
18	Panch Mahále	515	396	549	509	479	503	356	488	677	761	1,285	830	7,348	18
19	Ahmedabad	1,944	1,894	2,331	2,123	1,763	1,384	1,373	1,890	2,382	2,765	2,750	2,409	25,008	19
	Sind Registration District.														
20	Karáchi	889	661	717	649	604	599	559	607	614	694	790	904	8,278	20
21	Hyderabad	1,419	1,092	981	1,022	858	698	623	623	806	1,043	1,419	1,381	11,971	21
22	Thar and Párkar ..	364	314	427	341	325	306	201	196	189	217	227	278	3,387	22
23	Shikárpur	1,232	1,102	1,106	1,220	1,117	1,007	885	1,084	1,338	1,401	1,387	1,389	14,218	23
24	Upper Sind Frontier ..	124	125	110	127	118	127	138	104	123	120	143	114	1,473	24
	Total for the Province..	33,012	30,229	32,165	33,411	35,051	39,695	43,614	46,690	45,420	40,543	39,370	38,050	455,261	
	Ratio of deaths per 1,000 in each month.. ..	2·01	1·84	1·95	2·03	2·13	2·42	2·65	2·84	2·64	2·46	2·39	2·31	27·67	

ANNUAL FORM No. IV.—DEATHS *registered according to age in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1887.*

1	2	3		4		5		6		7		8		9		10		11		12		13
No.	Districts.	Under 1 year.		1 year and under 5.		5 and under 10.		10 and under 15.		15 and under 20.		20 and under 30.		30 and under 40.		40 and under 50.		50 and under 60.		60 and upwards.		No.
		Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	
	Western Registration District.																					
1	Khándesh	5,282	4,577	7,436	7,229	1,693	1,613	930	617	464	620	1,269	1,532	1,385	1,364	1,752	1,128	1,723	1,202	2,743	2,608	1
2	Násik	3,382	2,721	3,534	3,382	785	671	320	311	235	354	703	888	905	816	800	530	877	628	1,225	1,265	2
3	Thána	1,646	1,412	1,773	1,823	792	692	283	294	268	326	907	1,123	1,243	954	1,099	705	976	747	1,072	1,244	3
4	City of Bombay.. ..	3,214	2,689	1,422	1,589	344	284	311	327	432	642	1,268	1,239	1,191	777	926	492	825	581	867	1,032	4
5	Kolába	972	789	1,070	1,012	237	281	131	146	156	195	446	494	507	474	519	309	600	448	776	843	5
	Central Registration District.																					
6	Ahmednagar	4,000	3,057	3,136	2,875	716	665	374	352	335	432	933	1,080	907	860	1,020	769	1,035	863	1,482	1,564	6
7	Poona	3,197	2,452	3,416	3,100	685	722	378	378	332	477	1,003	1,227	1,035	982	1,112	758	1,199	931	1,785	1,870	7
8	Sholápur.. ..	2,691	2,005	2,638	2,661	614	545	315	255	298	386	804	937	834	770	840	609	771	671	997	1,050	8
9	Satara	3,902	3,130	4,932	5,034	1,537	1,333	625	523	524	651	1,269	1,559	1,378	1,249	1,458	1,128	1,474	1,433	2,176	2,465	9
10	Ratnágiri	1,136	973	1,172	1,136	322	353	246	212	236	260	740	842	792	724	846	692	1,041	851	1,351	1,849	10
	Southern Registration District.																					
11	Belgaum	2,538	2,050	3,057	3,242	771	714	324	256	264	280	775	888	946	860	951	603	810	645	1,464	1,583	11
12	Dharwar	3,565	2,965	2,349	2,490	511	530	283	281	306	359	930	1,271	1,100	1,098	1,163	787	1,058	994	1,347	1,494	12
13	Bijápur.. ..	2,301	1,989	2,215	2,249	544	479	285	222	285	293	603	843	744	720	660	581	624	602	756	912	13
14	Kánara	1,359	1,171	523	482	188	193	158	141	167	236	689	872	943	655	800	408	548	404	676	742	14
	Eastern Gujarat Registration District.																					
15	Surat	2,099	1,752	1,978	2,071	547	565	291	251	236	248	673	874	760	798	733	556	790	526	1,413	1,476	15
16	Broach	1,718	1,465	1,759	1,980	316	276	164	125	151	121	426	510	520	485	588	397	574	420	647	652	16
17	Kaira	2,543	2,645	3,322	2,691	596	443	360	218	326	218	916	781	1,102	925	1,333	795	1,407	1,025	1,750	1,866	17
18	Panch Mahále	665	679	1,004	1,071	308	292	100	75	108	99	246	257	293	244	300	190	345	244	398	466	18
19	Ahmedabad	3,706	2,358	3,186	2,998	493	400	309	246	317	279	1,183	1,002	1,190	1,001	1,288	857	1,307	995	1,366	1,628	19
	Sind Registration District.																					
20	Karáchi	1,298	1,212	436	443	180	154	111	74	101	132	456	401	490	388	473	235	384	285	598	450	20
21	Hyderabad	1,374	1,313	607	536	256	207	159	140	203	208	751	756	883	703	848	510	698	375	836	639	21
22	Thar and Párkar ..	401	401	197	171	102	70	63	24	76	50	170	140	165	124	158	96	177	121	378	292	22
23	Shikárpur	2,005	1,620	818	727	320	244	195	132	280	267	813	811	912	604	955	537	755	449	950	774	23
24	Upper Sind Frontier ..	208	163	87	82	40	41	29	11	28	17	68	52	102	63	102	47	71	47	119	99	24
	Total for the Province..	54,059	45,578	51,966	50,553	12,757	11,737	6,441	5,634	6,143	7,149	18,140	20,360	20,548	17,828	20,702	13,778	19,989	15,478	27,022	28,808	
	Ratios per 1,000 living..	235·50	199·32	61·61	58·05	10·29	10·29	6·13	6·81	9·04	11·77	12·04	13·77	15·79	15·39	25·79	18·60	40·18	30·70	81·41	71·43	

ANNUAL FORM No. V.—DEATHS *registered according to* CLASSES *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during the year 1887.*

1	2	3					4					5				
		POPULATION ACCORDING TO CENSUS OF 1881.					NUMBER OF DEATHS REGISTERED.					RATIO OF DEATHS PER 1,000 OF POPULATION.				
No.	Districts.	Mahomedans.	Hindus.	Christians.	Other classes.	Total.	Mahomedans.	Hindus.	Christians.	Other classes.	Total.	Mahomedans.	Hindus.	Christians.	Other classes.	Total.
	Western Registration District.															
1	Khándesh	92,297	1,143,533	1,143	256	1,237,231	2,951	44,192	9	20	47,172	31·97	38·64	7·85	78·43	38·13
2	Násik	35,294	742,877	2,644	391	781,206	1,116	24,162	21	90	24,389	31·62	31·18	7·94	..	31·22
3	Thána	36,471	723,256	39,059	3,581	807,367	764	17,674	795	75	19,308	20·95	24·27	20·35	20·94	23·91
4	City of Bombay	158,713	520,069	42,327	52,087	773,196	4,998	13,380	699	1,175	20,252	31·49	25·73	16·51	22·56	26·19
5	Kolába	23,811	455,425	791	2,803	482,830	566	9,889	18	49	10,464	21·33	21·71	22·76	17·48	21·67
	Central Registration District.															
6	Ahmednagar	39,592	706,565	4,821	250	751,228	1,411	24,755	50	48	26,264	35·64	35·04	10·37	..	34·96
7	Poona	42,036	846,811	9,593	2,271	900,621	1,217	25,713	90	118	27,138	28·95	30·36	9·47	51·96	30·13
8	Sholápur..	43,967	537,643	625	252	582,487	1,332	18,931	4	14	20,281	30·30	35·21	6·40	55·56	34·82
9	Sátára	36,712	1,024,626	886	126	1,062,350	1,227	36,667	8	69	37,971	33·42	35·79	9·03	..	35·74
10	Ratnágiri	71,051	922,745	3,275	19	997,090	1,197	15,924	58	55	16,334	16·85	16·28	17·71	..	16·38
	Southern Registration District.															
11	Belgaum	66,262	791,277	6,322	153	864,014	1,714	21,355	37	25	23,131	25·87	26·99	13·76	..	26·83
12	Dhárwár..	100,622	779,875	2,356	54	882,907	2,678	21,968	55	133	24,835	26·61	28·17	23·77	..	28·13
13	Bijápur	67,066	570,775	625	27	638,493	1,886	15,979	14	58	17,937	28·12	28·00	22·40	..	28·09
14	Kánara	24,282	382,997	14,509	52	421,840	627	10,594	305	27	11,354	25·82	27·14	21·09	..	26·92
	Eastern Gujarát Registration District.															
15	Surat	55,547	545,374	522	12,855	614,198	1,774	16,473	2	261	18,510	31·93	30·20	3·21	20·62	30·13
16	Broach	67,248	256,507	115	3,060	326,930	2,564	10,270	1	79	12,914	38·12	40·03	8·69	25·81	39·50
17	Kaira	72,954	730,663	1,045	133	804,800	2,142	23,102	30	..	25,274	29·36	31·61	28·70	..	31·40
18	Panch Mahále	16,069	229,338	44	37	255,470	393	6,955	..	..	7,348	24·47	29·95	..	..	28·76
19	Ahmedabad	83,942	769,958	1,529	885	856,324	2,481	22,492	19	16	25,008	29·55	29·21	12·42	18·07	29·20
	Sind Registration District.															
20	Karáchi	393,117	79,819	4,674	1,078	478,688	6,208	1,929	22	119	8,278	15·79	24·17	4·71	..	17·29
21	Hyderabad	621,945	132,199	428	52	754,624	8,973	2,886	4	108	11,971	14·43	21·83	9·34	..	15·86
22	Thar and Párkar	157,634	45,892	14	4	203,344	1,703	1,188	..	496	3,387	10·80	26·00	..	..	16·66
23	Shikárpur	696,167	162,004	786	79	852,986	11,110	3,016	14	78	14,218	16·10	18·62	19·02	..	16·67
24	Upper Sind Frontier	110,331	13,558	230	12	124,131	1,202	261	..	10	1,473	10·89	19·25	..	..	11·86
	Total for the Presidency ..	3,107,171	13,128,587	138,336	80,330	16,454,414	62,176	3,87,555	2,307	3,123	455,261	20·01	29·53	16·68	38·88	27·67

N.B.—This and all the other statements refer to Natives only, and not to Europeans. Hindus include Hindus of all castes, Jains, Brahmo or Prárthana Sámaj, Shikhs, low castes and aboriginals. In the Western, Central, Southern and Gujarát Registration Districts, aboriginals are included among Hindus, and in Sind among Mahomedans. "Other classes" include Jews, Pársis, Budhists, and unspecified.

ANNUAL FORM No. VI—DEATHS *registered from* DIFFERENT CAUSES *in the* DISTRICTS *and* TOWNS *of the* BOMBAY PRESIDENCY, *during the year 1887.*

1	2	3	4	5	6	7	8					9	10	11							12
							INJURIES.							RATIO OF DEATHS PER 1,000 OF POPULATION.							
No.	Districts and Towns.	Population according to Census of 1881.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Suicide. Male.	Suicide. Female.	Wounding or Accident.	Snake-bite or wild beasts killed by beasts.	Total.	All other Causes.	Total Deaths from all Causes.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other Causes.	From all Causes. For the year.	From all Causes. Mean of previous five years.	No.
	A—DISTRICTS.																					
	Western Registration District.																					
1	Khándesh	1,187,766	3,293	2,567	31,725	6,451	10	13	250	58	331	1,537	45,904	2·77	2·16	26·71	5·43	0·28	1·30	38·65	28·99	1
2	Násik	732,671	752	181	16,855	2,856	5	7	101	24	137	2,007	22,788	1·02	0·24	23·01	3·92	0·18	2·73	31·10	28·08	2
3	Thána	780,001	1,208	48	15,059	887	15	20	204	137	376	1,360	18,938	1·55	0·06	19·31	1·14	0·48	1·74	24·28	25·45	3
4	Kolába	459,299	237	72	7,655	563	6	..	110	47	163	1,348	10,038	0·52	0·16	16·67	1·23	0·35	2·92	21·86	19·41	4
	Central Registration District.																					
5	Ahmednagar	704,240	2,845	32	16,201	2,350	1	7	50	7	65	3,125	24,633	4·04	0·05	22·98	3·34	0·09	4·45	34·95	28·62	5
6	Poona	753,345	1,734	93	16,285	1,675	17	15	160	40	232	2,837	22,846	2·30	0·12	21·62	2·22	0·31	3·76	30·33	25·06	6
7	Sholápur	489,561	2,511	1	11,234	1,113	3	8	54	16	81	1,852	16,812	5·13	..	22·96	2·27	0·17	3·78	34·34	24·94	7
8	Sátára	1,010,868	6,784	..	22,272	2,568	20	32	200	58	310	4,454	36,388	6·71	..	22·03	2·54	0·31	4·41	36·00	26·59	8
9	Ratnágiri	975,527	236	17	8,650	1,945	6	7	126	46	185	4,792	15,805	0·24	0·02	8·85	1·99	0·19	4·91	16·20	15·42	9
	Southern Registration District.																					
10	Belgaum	809,824	517	2	10,314	5,507	23	33	167	30	253	4,785	21,878	0·64	..	12·35	6·80	0·31	5·91	27·01	27·58	10
11	Dhárwár	791,836	142	61	13,963	4,884	17	20	131	12	180	3,681	22,916	0·19	0·06	17·64	6·17	0·23	4·65	28·94	29·27	11
12	Bijápur	620,045	1,937	5	16,124	2,089	24	32	93	12	161	3,124	17,440	3·12	0·01	16·33	3·37	0·24	5·04	28·13	23·31	12
13	Kánara	397,450	3	2	6,288	603	17	15	149	24	205	3,677	10,778	0·01	0·01	15·82	1·52	0·52	9·25	27·12	28·82	13
	Eastern Gujarát Registration District.																					
14	Surat	491,125	718	113	11,071	1,898	9	12	152	44	218	1,078	15,096	1·46	0·23	22·54	3·86	0·44	2·20	30·74	28·24	14
15	Broach	278,170	187	44	9,223	232	2	3	57	35	97	715	11,198	0·67	0·16	33·67	0·83	0·35	2·57	40·26	30·63	15
16	Kaira	737,186	255	..	18,898	917	11	24	233	83	351	2,632	23,053	0·35	..	25·64	1·24	0·48	3·57	31·27	27·40	16
17	Panch Mahále	229,743	58	10	6,360	52	..	4	56	27	97	140	6,717	0·25	0·04	27·69	0·22	0·42	0·61	29·23	18·29	17
18	Ahmedabad	684,934	88	..	15,796	1,181	10	20	144	78	252	1,365	18,682	0·13	..	23·06	1·72	0·37	1·99	27·27	24·06	18
	Sind Registration District.																					
19	Karáchi	410,356	..	..	5,310	83	3	1	160	92	256	602	6,251	..	..	12·94	0·20	0·62	1·47	15·23	18·35	19
20	Hyderabad	709,429	..	44	10,237	94	2	6	168	153	329	289	10,993	..	0·06	14·42	0·13	0·46	0·41	15·49	16·14	20
21	Thar and Párkar	200,516	..	7	3,062	13	1	2	23	81	110	136	3,328	..	0·03	15·27	0·06	0·55	0·68	16·60	16·28	21
22	Shikárpur	769,913	92	143	11,650	90	6	7	212	83	308	167	12,460	0·12	0·19	15·13	0·12	0·40	0·22	16·17	17·46	22
23	Upper Sind Frontier ..	112,8[illegible]	..	..	1,200	8	4	..	13	13	30	19	1,257	..	..	10·63	0·07	0·27	0·17	11·14	11·75	23
	Total of Districts ..	14,337,234	23,607	3,432	280,637	38,069	212	288	3,017	1,210	4,727	45,722	396,194	1·64	0·24	19·57	2·66	0·33	3·19	27·63	22·28	

ANNUAL FORM No. VI.—DEATHS *registered from* DIFFERENT CAUSES *in the* DISTRICTS *and* TOWNS *of the* BOMBAY PRESIDENCY *during the year 1887—continued.*

1	2	3	4	5	6	7	8					9	10	11							12
							Injuries.							Ratio of Deaths per 1,000 of Population.							
							Suicide.												From all Causes.		
No.	Districts and Towns.	Population according to Census of 1881.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Males.	Females.	Wounding or Accident.	Snake-bite or killed by wild beasts.	Total.	All other Causes.	Total Deaths from all Causes.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other Causes.	For the year.	Mean of previous five years.	No.
	B—TOWNS.																					
	Khándesh District.																					
1	Dhulia	18,449	8	24	310	59	..	1	4	..	5	53	459	0·44	1·30	16·80	3·20	0·27	2·87	24·88	17·94	1
2	Nandurbár	6,841	..	20	139	64	..	..	1	1	2	6	232	..	2·92	19·99	9·36	0·29	0·88	32·45	23·05	2
3	Chopda	13,932	25	59	207	..	2	..	1	..	3	..	294	1·79	4·23	14·86	..	0·22	..	21·10	21·32	3
4	Nasirábad	10,243	34	8	212	30	..	..	..	..	..	9	293	3·32	0·78	20·69	2·93	..	0·88	28·60	23·43	4
	Násik District.																					
5	Násik	24,101	74	2	321	83	..	..	3	..	3	207	690	3·07	0·08	13·31	3·44	0·12	8·59	25·62	42·20	5
6	Yeola	17,685	40	26	389	77	..	..	3	..	3	127	662	2·26	1·47	21·99	4·36	0·17	7·18	37·43	34·49	6
7	Devláli Cantonment	1,086	..	..	10	3	..	..	..	..	..	15	28	..	..	9·21	2·76	..	13·81	25·78	11·45	7
8	Malegaon do.	3,780	28	10	77	..	..	..	..	..	..	106	221	7·40	2·65	20·37	..	..	28·04	58·46	38·36	8
	Thána District.																					
9	Thána	14,456	..	2	122	25	2	..	5	1	8	52	209	..	0·14	8·44	1·73	0·55	3·60	14·46	20·96	9
10	Kalyán	12,910	20	..	84	14	1	1	4	..	6	37	161	1·55	..	6·50	1·09	0·46	2·87	12·47	19·44	10
11	City of Bombay	773,196	262	110	5,613	1,596	54	32	259	4	349	12,322	20,252	0·34	0·14	7·26	2·06	0·45	15·94	26·19	27·71	11
	Kolába District.																					
12	Panvel	10,351	..	..	60	31	1	..	3	..	4	48	143	..	..	5·80	2·99	0·39	4·64	13·82	18·45	12
13	Alibág	6,374	..	..	103	22	..	..	3	..	3	33	161	..	..	16·16	3·45	0·47	5·18	25·25	24·78	13
14	Mahad	6,804	1	..	70	24	..	..	..	1	1	26	122	0·14	..	10·30	3·52	0·15	3·82	17·94	21·16	14
	Ahmednagar District.																					
15	Ahmednagar	32,903	66	25	367	160	..	3	4	..	8	563	1,192	2·10	0·76	11·15	4·86	0·24	17·11	36·22	33·32	15
16	Sangamner	8,796	40	...	165	9	..	..	..	..	..	140	354	4·55	..	18·76	1·02	..	15·92	40·25	31·86	16
17	Ahmednagar Cantonment	4,589	..	..	55	6	..	..	..	..	..	19	80	..	..	11·98	1·31	..	4·14	17·43	18·91	17
	Poona District.																					
18	Poona City	99,622	314	3	1,161	176	1	2	57	1	61	1,511	3,226	3·15	0·03	11·65	1·77	0·61	15·17	32·38	26·82	18
19	Junnar	10,373	..	..	85	32	..	..	..	..	..	170	287	..	..	8·19	3·08	..	16·39	27·66	8·06	19
20	Poona Cantonment	25,042	10	..	404	30	..	1	5	..	6	204	654	0·40	..	16·13	1·20	0·24	8·15	26·12	26·12	20
21	Kirkee Cantonment	3,660	..	..	21	8	..	..	1	..	1	85	125	..	..	8·70	2·25	0·28	23·88	35·11	29·20	21
	Sholápur District.																					
22	Sholápur	59,890	258	..	1,253	145	3	2	5	..	10	342	2,011	4·27	..	21·01	2·42	0·17	5·71	33·58	31·80	22
23	Bársi	16,126	72	1	291	43	1	..	11	..	12	175	594	4·46	0·06	24·25	2·67	0·74	10·85	43·03	38·31	23
24	Pandharpur	16,910	145	..	393	136	1	1	3	..	5	85	764	8·57	..	23·24	8·04	0·30	5·03	45·18	65·41	24
	Sátára District.																					
25	Sátára	29,028	86	..	431	170	4	2	4	..	10	217	864	1·24	..	14·85	5·86	0·34	7·47	29·76	25·03	25
26	Karad	10,778	93	..	188	41	..	..	2	2	4	70	346	8·63	..	12·80	3·80	0·37	6·50	32·10	28·15	26
27	Wái	11,676	44	..	190	33	..	..	3	..	3	103	373	3·77	..	16·27	2·83	0·26	8·82	31·95	26·48	27
	Ratnágiri District.																					
28	Vengurla	8,947	..	1	64	..	..	..	3	..	3	178	246	..	0·11	7·15	..	0·34	19·89	27·49	26·94	28
29	Ratnágiri	12,616	6	..	109	26	..	..	..	2	2	140	283	0·47	..	8·64	2·06	0·16	11·10	22·43	20·29	29
	Belgaum District.																					
30	Belgaum	23,115	19	..	251	79	..	2	3	..	5	160	514	0·82	..	10·86	3·42	0·22	6·92	22·24	22·45	30
31	Gokak	10,307	6	..	123	74	1	..	..	1	2	120	325	0·58	..	11·93	7·18	0·19	11·64	31·53	24·91	31
32	Athni	11,860	74	..	113	126	..	..	9	..	9	40	312	2·15	..	10·10	11·26	0·80	3·58	27·89	27·80	32
33	Belgaum Cantonment	9,583	..	..	51	29	..	..	1	..	1	71	162	..	..	5·32	3·03	0·10	7·41	15·86	15·55	33
	Dhárwár District.																					
34	Dhárwár	27,191	..	..	312	9	2	5	15	3	25	449	796	..	..	11·47	0·33	0·91	16·51	29·24	25·49	34
35	Hubli	36,677	..	..	331	71	2	7	8	..	17	182	601	..	..	9·02	[illegible]	0·46	4·96	16·39	24·21	35
36	Gadag Betligeri	17,001	..	..	144	99	1	2	10	..	13	15	271	..	..	8·47	5·82	0·76	0·88	15·94	24·12	36
37	Ránebennur	10,202	35	2	98	112	..	..	4	..	4	3	252	3·43	0·20	9·61	10·98	0·39	0·29	24·70	33·33	37
	Bijápur District.																					
38	Bijápur	11,424	15	..	188	153	..	..	11	1	12	10	378	1·31	..	16·46	13·39	1·05	0·88	33·09	14·81	38
39	Kaládgi	7,024	..	..	71	37	..	..	..	..	..	11	119	..	..	10·11	5·27	..	1·57	16·94	9·45	39
	Kánara District.																					
40	Kárwár	13,761	..	..	139	1	..	..	9	2	11	130	281	..	..	10·10	0·07	0·80	9·45	20·42	19·84	40
41	Kumta	10,629	..	..	144	20	..	..	3	1	4	127	295	..	..	13·55	1·88	0·38	11·95	27·75	28·60	41
	Surat District.																					
42	Surat	109,844	55	..	2,102	144	2	1	25	..	28	862	3,191	0·50	..	19·13	1·31	0·25	7·84	29·05	29·32	42
43	Bulsár	13,229	61	4	84	25	..	..	6	..	6	43	223	4·61	0·30	6·34	1·88	0·45	3·25	16·85	12·77	43
	Broach District.																					
44	Broach	37,381	113	3	808	18	..	2	16	..	18	225	1,185	3·03	0·08	21·67	0·48	0·48	6·04	31·78	27·49	44
45	Jambusar	11,479	11	..	135	39	..	..	3	3	6	299	531	0·96	..	16·12	2·61	0·52	26·04	46·25	59·29	45
	Kaira District.																					
46	Kaira	12,640	11	..	241	18	..	..	4	1	5	110	485	0·87	..	26·97	1·42	0·39	8·70	38·37	[illegible]	46
47	Nadiád	28,304	1	..	677	23	..	..	8	..	8	305	1,014	0·03	..	23·91	0·81	0·28	10·77	35·82	[illegible]	47
48	Borsad	12,228	3	..	231	3	..	1	3	2	6	14	257	0·24	..	18·89	0·24	0·49	1·14	21·01	[illegible]	48
49	Kapadvanj	14,442	11	..	346	14	1	1	1	..	3	41	465	0·76	..	27·42	0·96	0·20	2·83	31·19	[illegible]	49
	Panch Mahals District.																					
50	Godhra	13,342	1	..	205	13	1	..	4	..	5	21	245	0·07	..	15·36	0·97	0·37	1·57	18·37	[illegible]	50
51	Dohad	12,394	..	3	364	6	..	..	7	..	7	6	386	..	0·24	29·36	0·48	0·56	0·48	31·12	[illegible]	51
	Ahmedabad District.																					
52	Ahmedabad	124,767	42	..	3,276	48	..	1	8	1	10	1,253	4,633	0·34	..	26·26	0·38	0·08	10·12	37·19	[illegible]	52
53	Gogha	7,033	..	..	92	16	1	..	..	..	1	41	140	..	..	11·60	2·26	0·14	5·80	19·8	[illegible]	53
54	Viramgám	18,900	..	..	625	72	..	..	5	..	5	187	889	..	..	32·91	3·79	0·26	9·85	46·83	[illegible]	54
55	Dholka	17,716	3	9	374	32	..	1	6	7	14	184	621	0·45	0·50	21·11	1·80	0·79	10·38	[illegible]	21	55
56	Ahmedabad Cantonment	1,840	2	..	36	..	..	..	..	..	..	..	37	1·03	..	18·04	..	..	..	19·07	[illegible]	56

ANNUAL FORM No. VI—DEATHS *registered from* DIFFERENT CAUSES *in the* DISTRICTS *and* TOWNS *of the* BOMBAY PRESIDENCY, *during the year 1887—continued.*

1	2	3	4	5	6	7	8						9	10	11								12
							Injuries.								Ratio of Deaths per 1,000 of Population.								
							Suicide.																
No.	Districts and Towns	Population according to Census of 1881.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Male.	Female.	Wounding or Accident.	Snake-bite or killed by wild beasts.	Total.	All other Causes.	Total Deaths from all Causes.	Cholera.	Small-pox.	Fevers.	Bowel-complaints.	Injuries.	All other Causes.	From all Causes. For the year.	From all Causes. Mean of the previous five years.	No.
	Karáchi District.																						
57	Karáchi	63,333	..	2	1,061	161	4	1	30	..	35	768	2,027	..	0·03	15·53	2·36	0·51	11·24	29·66	25·84	57
	Hyderabad District.																						
58	Hyderabad	45,195	..	2	740	..	3	..	17	2	22	214	978	..	0·04	16·37	..	0·49	4·74	21·64	28·07	58
	Thar and Párkar District.																						
59	Umarkot	8,818	..	..	52	..	..	..	..	..	..	7	59	..	..	18·39	..	..	2·48	20·86	32·11	59
	Shikárpur District.																						
60	Shikárpur	42,496	..	1	681	17	1	1	9	1	12	37	748	..	0·02	16·03	0·40	0·28	0·87	17·60	19·56	60
61	Sukkur	27,389	96	3	481	50	1	..	14	..	15	89	734	3·51	0·11	17·56	1·83	0·55	3·25	26·80	23·24	61
62	Lárkhána	13,188	13	1	214		..	..	5	1	6	48	286	0·99	0·08	16·23	0·30	0·45	3·64	21·69	21·21	62
	Upper Sind Frontier District.																						
63	Jacobabad	11,352	..	..	153	18	1	..	3	..	4	76	216	..	..	13·92	1·59	0·35	3·17	19·03	20·72	63
	Total of Towns ..	2,105,604	2,104	321	28,085	4,565	92	70	631	38	831	23,161	59,057	0·99	0·15	13·34	2·17	0·40	11·00	28·05	27·03	
	Total for the Presidency ..	16,454,414	25,711	3,753	3,08,722	42,634	304	358	3,648	1,248	5,558	68,883	455,261	1·56	0·23	18·71	2·59	0·34	4·19	27·67	25·43	

N.B.—Districts A in this statement do not include the population or deaths of towns B. In all other statements "Districts" include towns.
Total population for the Presidency includes Europeans, Eurasians and fighting men numbering 11,576.

ANNUAL FORM No. VII—DEATHS *registered from* CHOLERA *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during each month of the year 1887.*

1	2	3		4		5												6			7			8	9
		Circles of Registration.		Villages.														Total.			Ratio of Deaths per 1,000 of Population.				
No.	Districts.	Number in each District.	Number from which Deaths from Cholera were reported.	Number in each District.	Number from which Deaths from Cholera were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Male.	Female.	Total.	Male.	Female.	Total.	Mean ratio per 1,000 of previous five years.	No.
	Western Registration District.																								
1	Khándesh	26	[illegible]	2,679	322	..	..	9	41	299	928	780	1,121	182	..	..	1	1,789	1,674	3,350	2·83	2·60	2·72	2·10	1
2	Násik	16	16	1,629	97	..	..	5	..	19	183	219	273	113	41	30	11	458	436	894	1·15	1·14	1·14	1·87	2
3	Thána	12	10	1,880	106	..	..	..	11	24	48	175	325	189	195	196	65	611	617	1,228	1·47	1·58	1·52	1·41	3
4	City of Bombay ..	1	1	..	..	1	2	2	1	8	45	101	48	37	15	2		181	81	262	0·39	0·26	0·34	0·61	4
5	Kolába	10	6	1,191	28	..	..	..	..	..	..	23	108	44	..	63		119	119	238	0·49	0·51	0·49	1·04	5
	Central Registration District.																								
6	Ahmednagar	14	13	1,331	355	..	..	..	9	23	775	1,226	589	286	100	6	..	1,580	1,374	2,954	4·14	3·72	3·93	2·32	6
7	Poona	12	10	1,181	226	..	..	..	1	48	471	551	441	217	162	161		1,062	976	2,038	2·35	2·19	2·29	1·82	7
8	Sholápur	10	10	709	282	..	..	..	38	443	915	1,989	248	196	29	15	4	1,893	1,391	3,284	5·44	4·90	5·12	1·66	8
9	Sátára	15	14	1,340	441	..	..	..	57	960	2,254	2,186	911	203	176	100	90	3,700	3,257	6,957	6·95	6·15	6·55	1·20	9
10	Ratnágiri	10	7	1,295	33	..	..	..	..	..	3	28	89	65	4	27	26	116	126	242	0·25	0·24	0·24	0·09	10
	Southern Registration District.																								
11	Belgaum	11	8	1,073	60	..	..	..	..	..	44	179	77	166	64	35	1	296	270	566	·68	0·65	0·66	1·73	11
12	Dhárwár	18	10	1,281	27	..	..	..	..	7	29	3	33	42	14	25	34	103	84	187	·23	0·19	0·21	1·41	12
13	Bijápur	10	9	1,139	267	..	..	..	..	38	316	417	437	263	404	67	10	998	954	1,952	3·14	2·97	3·06	1·39	13
14	Kánara	13	2	1,107	2	..	..	..	..	..	..	..	..	..	3	..	..	1	2	3	·04	0·01	0·07	0·21	14
	Eastern Gujarát Registration District.																								
15	Surat	10	9	780	89	..	..	..	..	..	120	42	123	279	84	70	116	384	450	834	1·25	1·46	1·35	0·76	15
16	Broach	8	8	403	44	..	..	..	..	..	..	..	92	67	6	129	17	148	163	311	0·87	1·02	0·95	0·67	16
17	Kaira	11	9	677	23	..	..	..	..	..	1	22	15	3	93	119	28	172	109	281	0·40	0·28	0·34	0·40	17
18	Panch Mahals	7	3	673	7	..	..	..	..	..	1	..	..	17	37	4	..	31	24	59	0·23	0·22	0·23	0·33	18
19	Ahmedabad	12	7	857	14	..	..	..	1	..	..	..	11	31	27	66	4	81	59	140	0·16	0·14	0·16	0·31	19
	Sind Registration District.																								
20	Karáchi	16	..	722	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3·12	20
21	Hyderabad	15	..	1,104	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·95	21
22	Thar and Párkar	8	..	72	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	0·13	22
23	Shikárpur	18	4	1,370	7	..	..	..	..	..	..	..	104	61	36	..	..	126	75	201	0·27	0·19	0·24	0·95	23
24	Upper Sind Frontier ..	4	..	142	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1·22	24
	Total for the Presidency	267	176	24,635	2,461	..	1	16	159	1,840	5,613	6,882	5,123	2,762	1,611	1,072	632	13,576	12,135	25,711	1·60	1·52	1·56	1·18	

ANNUAL FORM No. VIII.—DEATHS *registered from* SMALL-POX *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during each month of the year 1887.*

No.	Districts.	Circles of Registration: Number in each District.	Circles of Registration: Number from which Deaths from Small-pox were reported.	Villages: Number in each District.	Villages: Number from which Deaths from Small-pox were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total: Male.	Total: Female.	Total: Total.	No. of these Deaths among Children: Under 1 year.	No. of these Deaths among Children: Under 12 years.	Total Ratio of Deaths per 1,000 of Population: Male.	Total Ratio of Deaths per 1,000 of Population: Female.	Total Ratio of Deaths per 1,000 of Population: Total.	Mean ratio per 1,000 of previous five years.	No.
1	2	3		4		5												6			7		8			9	10
	Western Registration District.																										
1	Khándesh	26	26	2,679	501	114	359	710	795	408	151	54	25	9	6	18	29	1,374	1,304	2,678	795	1,820	2·17	2·16	2·17	0·47	1
2	Násik	16	13	1,629	56	1	10	46	67	25	20	11	6	5	4	9	15	129	90	219	59	142	0·32	0·28	0·27	0·32	2
3	Thána	12	5	1,880	18	1	2	3	7	6	2	7	5	2	2	3	10	30	20	50	23	17	0·07	0·05	0·06	0·64	3
4	City of Bombay ...	1	1	...	...	4	2	18	18	20	12	12	1	3	2	3	15	61	50	110	26	38	0·11	0·19	0·14	0·47	4
5	Kolába	10	6	1,191	17	1	1	...	4	8	3	1	13	2	9	16	14	34	38	72	19	41	0·14	0·18	0·16	0·41	5
	Central Registration District.																										
6	Ahmednagar	14	7	1,331	15	3	1	8	2	5	7	3	...	2	1	12	13	27	30	57	23	32	0·07	0·08	0·08	0·12	6
7	Poona	12	8	1,181	21	2	2	...	2	2	8	6	7	4	14	25	24	49	47	96	25	50	0·11	0·11	0·11	0·51	7
8	Sholápur	10	2	709	2	...	1	...	1	...	...	...	...	...	...	...	...	1	1	2	2	...	...	...	0·01	0·17	8
9	Sátára	15	...	1,340	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·31	9
10	Ratnágiri	10	7	1,295	11	...	...	...	3	2	6	1	3	1	...	...	2	10	8	18	3	7	0·02	0·02	0·02	0·47	10
	Southern Registration District.																										
11	Belgaum	11	2	1,073	2	1	...	...	...	...	1	...	...	...	...	...	...	...	2	2	...	...	...	0·04	0·02	0·71	11
12	Dhárwár	18	9	1,281	28	5	3	6	6	7	9	4	1	1	2	3	6	28	25	53	...	...	0·06	0·06	0·06	0·81	12
13	Bijápur	10	3	1,139	4	1	1	1	...	...	...	...	...	1	...	...	1	2	3	5	...	...	0·06	0·09	0·08	0·81	13
14	Kánara	13	2	1,107	2	...	1	...	...	...	...	...	...	...	1	...	...	...	2	2	...	...	...	0·01	0·05	0·85	14
	Eastern Gujarát Registration District.																										
15	Surat	10	8	780	49	9	19	30	27	16	4	1	...	1	2	4	4	63	54	117	36	60	0·20	0·17	0·19	0·58	15
16	Broach	8	7	403	19	1	10	12	6	14	1	2	...	1	...	...	...	24	23	47	26	18	0·14	0·14	0·14	0·11	16
17	Kaira	11	...	577	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·08	17
18	Panch Maháls	7	3	673	7	...	...	3	6	4	...	...	...	...	...	...	...	7	6	13	1	7	0·05	0·04	0·05	0·11	18
19	Ahmedabad	12	1	857	1	...	...	6	1	2	...	...	...	...	...	...	...	5	4	9	4	1	0·01	0·09	0·01	0·10	19
	Sind Registration District.																										
20	Karáchi	16	1	722	1	...	...	...	...	...	...	...	...	1	1	...	...	1	1	2	...	...	0·04	0·05	0·04	0·34	20
21	Hyderabad	15	4	1,104	18	1	...	1	...	6	3	11	6	8	4	4	2	29	17	46	4	19	0·07	0·05	0·06	0·41	21
22	Thar and Párkar ...	8	2	72	3	...	...	1	5	...	1	...	...	...	...	...	...	7	...	7	4	1	0·06	...	0·03	0·07	22
23	Shikárpur	18	17	1,370	78	21	26	23	12	14	24	13	2	1	4	...	8	74	74	148	56	32	0·16	0·19	0·17	0·07	23
24	Upper Sind Frontier ...	4	...	142	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	0·08	24
	Total for the Presidency.	285	134	24,535	853	165	438	868	962	539	252	126	69	42	52	97	143	1,945	1,808	3,753	1,106	2,285	0·23	0·23	0·23	0·40	

ANNUAL FORM No. IX.—DEATHS registered from *FEVERS in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during each month of the year 1887.*

No.	Districts.	Circles of Registration: Number in each District.	Circles of Registration: Number from which Deaths from Fevers were reported.	Villages: Number in each District.	Villages: Number from which Deaths from Fevers were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total: Male.	Total: Female.	Total: Total.	Ratio of Deaths per 1,000 of Population: Male.	Ratio of Deaths per 1,000 of Population: Female.	Ratio of Deaths per 1,000 of Population: Total.	Mean ratio per 1,000 of previous five years.	No.
1	2	3		4		5												6			7			8	9
	Western Registration District.																								
1	Khándesh	26	26	2,679	2,284	2,134	2,060	2,304	2,915	2,946	2,763	2,645	3,791	3,323	2,541	2,653	2,449	16,849	15,735	32,584	21·65	[illegible]	26·83	20·92	1
2	Násik	16	16	1,620	1,507	1,199	1,058	1,058	1,210	1,340	1,537	1,909	2,053	1,860	1,604	1,493	1,401	9,154	8,498	17,652	23·04	[illegible]	22·59	20·58	2
3	Thána	12	12	1,880	1,723	1,589	1,600	1,411	1,286	1,219	1,052	910	1,111	1,137	1,117	1,287	1,536	7,846	7,419	15,265	[illegible]	18·9	[illegible]	19·90	3
4	City of Bombay	1	1	...	...	418	433	457	448	508	444	446	538	487	470	461	504	2,951	2,662	5,613	[illegible]	[illegible]	7·26	8·27	4
5	Kolába	10	10	1,191	1,071	754	742	711	756	711	578	506	605	632	531	615	748	4,028	3,860	7,888	[illegible]	[illegible]	[illegible]	14·11	5
	Central Registration District.																								
6	Ahmednagar	14	14	1,331	1,243	1,108	921	862	930	1,043	1,590	2,187	2,106	1,904	1,648	1,240	1,189	8,790	7,998	16,788	[illegible]	21·64	23·34	19·72	6
7	Poona	12	12	1,181	1,042	1,172	966	998	1,168	1,302	1,539	1,911	1,997	2,066	1,870	1,566	1,411	9,303	8,663	17,966	20·4	19·4	[illegible]	16·95	7
8	Sholápur	10	10	709	677	862	755	711	820	952	1,084	1,558	1,560	1,441	1,407	1,141	1,005	6,802	6,494	13,296	[illegible]	22·5	[illegible]	19·15	8
9	Sátára	15	15	1,340	1,206	1,634	1,327	1,416	1,619	1,888	2,276	2,442	2,494	2,211	1,948	1,898	1,879	11,519	11,512	23,031	21·64	21·7	[illegible]	[illegible]	9
10	Ratnágiri	10	10	1,295	1,168	780	812	764	767	641	627	670	760	682	697	701	896	4,447	4,356	8,803	[illegible]	8·81	[illegible]	8·49	10
	Southern Registration District.																								
11	Belgaum	11	11	1,073	990	889	840	865	969	1,016	1,046	1,064	1,076	898	831	866	1,012	5,869	5,483	11,352	13·51	[illegible]	[illegible]	[illegible]	11
12	Dhárwár	18	18	1,281	1,263	1,434	1,405	1,380	1,325	1,226	1,156	1,197	1,182	1,118	1,037	1,055	1,336	7,380	7,471	14,851	16·70	[illegible]	[illegible]	15·4	12
13	Bijápur	10	10	1,139	1,037	710	619	667	663	646	915	1,128	1,305	1,104	977	806	843	5,153	5,230	10,383	16·22	[illegible]	[illegible]	14·4	13
14	Kánara	13	13	1,107	1,021	761	670	655	525	454	467	486	490	492	499	494	572	3,393	3,178	6,571	15·21	[illegible]	15·67	[illegible]	14
	Eastern Gujarát Registration District.																								
15	Surat	10	10	780	741	1,113	988	1,091	909	992	978	909	1,241	1,286	1,053	1,298	1,309	6,709	6,548	13,257	21·90	21·24	21·58	21·01	15
16	Broach	8	8	403	389	727	735	858	836	793	670	665	829	1,080	1,327	1,364	1,032	5,854	5,062	10,916	34·74	31·94	[illegible]	[illegible]	16
17	Kaira	11	11	577	577	1,240	1,233	1,531	1,647	1,742	1,149	1,169	1,423	1,866	2,008	2,032	1,994	11,097	9,446	20,543	26·00	24·98	[illegible]	[illegible]	17
18	Panch Maháls	7	7	673	601	423	387	499	452	427	457	340	469	637	708	1,260	811	3,541	3,388	6,929	26·99	[illegible]	[illegible]	[illegible]	18
19	Ahmedabad	12	12	857	824	1,590	1,610	1,902	1,737	1,422	1,047	994	1,482	1,901	2,322	2,240	1,985	10,749	9,439	20,188	19·52	17·30	18·41	[illegible]	19
	Sind Registration District.																								
20	Karáchi	16	16	722	722	729	527	578	495	456	434	372	417	441	538	644	740	3,508	2,863	6,371	13·19	13·46	13·31	12·99	20
21	Hyderabad	15	15	1,104	1,104	1,320	1,046	928	970	771	608	520	523	680	954	1,344	1,313	6,014	4,963	10,977	14·77	14·29	14·55	14·00	21
22	Thar and Párkar ...	8	8	72	72	351	[illegible]	410	318	309	282	172	176	151	187	211	254	1,723	1,391	3,114	15·33	[illegible]	15·31	14·83	22
23	Shikárpur	18	18	1,370	1,173	1,140	1,012	1,027	1,160	1,061	919	788	822	1,162	1,291	1,335	1,310	7,270	5,756	13,026	15·77	14·69	15·27	15·87	23
24	Upper Sind Frontier ...	4	4	142	142	114	119	107	124	109	104	123	95	101	115	139	108	777	581	1,358	11·07	10·76	10·94	10·75	24
	Total for the Presidency.	285	285	24,535	22,735	24,282	22,144	23,189	24,138	23,573	23,732	25,120	28,455	28,740	28,670	29,042	27,637	160,726	147,996	308,722	18·91	18·61	18·70	16·81	

ANNUAL FORM No. X.—DEATHS *registered from* BOWEL-COMPLAINTS *in the* DISTRICTS *of the* BOMBAY PRESIDENCY *during each month of the year 1887.*

1	2	3		4		5												6			7			8	9
No.	Districts.	Circles of Registration.		Villages.														Total.			Ratio of Deaths per 1,000 of Population.			Mean ratio per 1,000 for previous five years.	No.
		Number in each District.	Number from which Deaths from Bowel-complaints were reported.	Number in each District.	Number from which deaths from Bowel-complaints were reported.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Male.	Female.	Total	Male.	Female.	Total.		
	Western Registration District.																								
1	Khándesh	26	25	2,679	1,170	382	347	422	482	561	626	652	969	782	513	417	451	3,702	2,902	6,604	5·85	4·80	5·34	4·19	1
2	Násik	14	15	1,629	603	139	129	166	178	219	211	321	489	460	292	224	211	1,699	1,320	3,019	4·27	3·44	3·86	2·94	2
3	Thána	12	12	1,880	369	64	57	60	48	69	57	86	123	114	118	67	73	471	455	926	1·14	1·11	1·14	0·45	3
4	City of Bombay ..	1	1	..	..	175	142	112	137	124	102	106	194	168	110	105	121	920	776	1,696	1·99	2·10	2·05	2·19	4
5	Kolába	10	10	1,101	279	43	37	81	31	29	26	44	108	105	40	46	100	372	268	640	1·52	1·12	1·32	0·49	5
	Central Registration District.																								
6	Ahmednagar	14	14	1,331	551	175	102	113	107	133	291	374	350	319	244	167	160	1,406	1,129	2,535	3·64	3·05	3·37	2·69	6
7	Poona	12	12	1,181	395	135	119	106	112	128	139	237	243	217	227	157	131	1,106	815	1,921	2·43	1·83	2·13	1·83	7
8	Sholápur..	10	10	769	300	79	59	62	74	112	151	177	162	194	162	122	83	811	626	1,437	2·75	2·18	2·47	2·14	8
9	Sátára	15	15	1,346	431	159	137	140	135	246	381	372	373	253	238	207	171	1,450	1,362	2,812	2·72	2·57	2·65	2·20	9
10	Ratnágiri	10	9	1,295	597	159	136	191	100	144	162	157	215	139	143	146	178	1,132	839	1,971	2·39	1·60	1·98	1·12	10
	Southern Registration District.																								
11	Belgaum	11	11	1,073	710	326	287	304	310	403	477	652	797	625	564	525	545	3,043	2,772	5,815	7·00	6·45	6·73	5·54	11
12	Dhárwár	18	15	1,281	928	420	421	363	393	424	472	448	474	444	418	416	437	2,706	2,419	5,125	6·25	5·46	5·86	5·46	12
13	Bijápur	10	10	1,139	540	187	140	121	130	139	156	257	308	260	231	186	184	1,193	1,086	2,279	3·76	3·38	3·57	2·64	13
14	Kánara	13	13	1,107	265	63	68	57	46	31	45	38	70	61	50	46	49	371	253	624	1·46	1·27	1·48	1·79	14
	Eastern Gujarát Registration District.																								
15	Surat	10	10	789	338	175	143	143	151	164	139	166	205	194	188	187	210	1,086	981	2,067	3·54	3·18	3·36	2·77	15
16	Broach	8	8	403	79	19	16	17	19	25	18	22	22	24	30	45	23	158	122	280	0·93	0·76	0·85	1·86	16
17	Kaira	11	11	577	194	71	99	74	72	85	79	71	89	88	85	107	84	542	433	975	1·26	1·14	1·21	3·02	17
18	Panch Mahále	7	7	673	23	4	6	6	7	13	1	5	5	5	8	8	8	33	38	71	0·25	0·30	0·27	0·44	18
19	Ahmedabad	12	11	857	252	117	71	126	83	96	94	129	150	113	113	112	135	789	560	1,349	1·79	1·34	1·57	1·94	19
	Sind Registration District.																								
20	Karáchi	16	13	722	59	18	24	26	19	13	20	12	22	33	23	17	17	138	106	244	0·52	0·50	0·51	0·47	20
21	Hyderabad	15	12	1,104	61	10	4	6	9	6	3	8	3	13	12	11	9	57	37	94	0·14	0·11	0·12	0·12	21
22	Thar and Párkar ..	8	4	72	11	..	1	1	2	1	..	1	1	1	5	..	..	5	8	13	0·04	0·09	0·06	0·10	22
23	Shikárpur	18	17	1,279	43	18	10	8	8	9	6	13	17	33	10	10	10	99	62	161	0·21	0·16	0·19	0·24	23
24	Upper Sind Frontier ..	4	4	142	9	3	..	2	1	4	7	..	2	4	1	1	1	12	14	26	0·17	0·26	0·21	0·32	24
	Total for the Presidency.	285	272	21,535	8,212	2,941	2,548	2,647	2,714	3,160	3,668	4,318	5,371	4,695	3,795	3,329	3,450	23,360	19,271	42,634	2·74	2·42	2·59	2·20	

A.—VACCINE DEPARTMENT.

Statement No. I, showing Particulars of Vaccination in the Bombay Presidency during the year 1887-88.

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator	Primary Vaccinations.				Re-vaccinations.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE WESTERN REGISTRATION DISTRICT.				Males.	Females.	Total.														
	KHÁNDESH COLLECTORATE—																				
1	Nandurbár Town, Local Fund.	6,841	14,993·97	...	P. 48 R. 7	42 14	90 21	111	90	41	47	90	21	21	100	100	16·23	...	...	13	1·90
2	Dhulia Town	18,449	10,023·23	1	P. 519 R. 4	477 1	996 5	1,001	998	867	97	988	5	5	99·19	100	53·82	885	47·43	5	0·27
3	Chopda Town, Local Fund ...	13,932	29,234·36	...	203	191	394	394	394	320	52	376	...	...	95·43	...	26·99	456	32·73	13	0·93
4	Nasirabad Town do. ...	10,243	61,266·54	1	P. 147 R. 6	125 ...	272 6	278	273	166	67	233	6	1	85·66	16·66	22·84	425	41·49	18	1·76
5	In the 22 Rural Circles, Local Fund	1,187,766	119·49	24	P. 18,154 R. 316	17,576 200	35,730 516	1,510	35,785	24,846	8,553	33,621	516	293	94·09	56·78	28·56	35,604	29·98	766	0·65
	Total ...	1,237,231	124·43	26	P. 19,071 R. 333	18,411 215	37,482 548	1,463	37,540	26,240	8,816	35,308	548	320	94·20	58·39	28·79	37,370	30·20	815	0·66
	NÁSIK COLLECTORATE—																				
6	Yeola Town	17,685	80,845·71	...	9	7	16	16	16	9	5	14	...	...	87·50	...	0·79	...	...	14	0·79
7	Násik do.	24,101	48,528·85	1	P. 416 R. 6	413 ...	829 6	835	829	509	316	826	6	4	99·64	66·66	34·44	871	36·12	10	0·41
8	Devláli Cantonment	2,969			22	22	44	44	44	38	2	40	...	...	90·90	...	13·47	96	32·33	...	...
9	Málegaon ... Cantonment	3,780	...	1	P. 50 R. 1	44 1	94 2	96	94	76	15	91	2	2	96·80	100	24·60	87	23·02	1	0·26
	Local Fund.				P. 103 R. 1	76 6	179 7	186	179	123	38	161	7	6	90·00	85·71	44·18				
	Municipal ...				P. 38 R. 2	24 ...	62 2	64	62	28	16	44	2	2	70·97	100·	12·17				
10	In the 12 Rural Circles. Local Fund .	732,671	123·36	12	P. 9,052 R. 145	8,556 32	17,608 177	1,482	17,627	11,426	5,316	16,832	178	141	95·60	79·66	23·17	18,666	26·84	235	0·32
	Municipal ...				P. 371 R. 5	369 1	740 6	746	740	439	285	730	6	4	98·65	66·67	1·00				
	Total ...	781,206	131·52	14	P. 10,061 R. 160	9,511 40	19,572 200	1,412	19,591	12,648	5,993	18,738	201	159	95·74	79·50	24·19	19,720	25·24	260	0·33
	THA'NA COLLECTORATE—																				
11	Kalyán Town	12,910	5,164·	1	P. 282 R. 24	246 3	528 27	555	528	274	214	499	27	19	94·51	70·37	40·12	552	42·76	4	0·31
12	Thána do.	14,456	2,069·76	1	P. 423 R. 160	240 17	663 177	840	663	427	1	663	177	28	100	15·82	47·80	679	46·97	6	0·42
13	In the 10 Rural Circles ... Local Fund .	780,001	198·65	12	P. 9,180 R. 68	8,451 55	17,631 123	1,479	17,656	7,850	9,066	17,216	123	75	97·65	60·97	22·17	17,003	21·80	482	0·62
	Municipal ...			...		254	285	539	539	439	91	530	...	...	98·33	...	0·68				
	Total ...	807,367	205·12	14	P. 10,139 R. 252	9,222 75	19,361 327	1,406	19,386	8,990	9,372	18,908	327	122	97·66	37·31	23·57	18,234	22·58	492	0·69

Statement No. I., showing Particulars of Vaccinaton, &c.—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator	Primary Vaccinations. Total.	Primary Vaccinations. Successful. Under 1 year.	Primary Vaccinations. Successful. Over 1 and under 6 years.	Primary Vaccinations. Successful. Total of all Ages.	Re-vaccinations. Total.	Re-vaccinations. Successful.	Percentage of Successful Cases. Primary.	Percentage of Successful Cases. Re-vaccination.	Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years. Number.	Average Annual Number of Persons successfully vaccinated during previous five years. Ratio per 1,000.	Average Annual Number of Deaths from Small-pox during previous five years. Number.	Average Annual Number of Deaths from Small-pox during previous five years. Ratio per 1,000.
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE WESTERN REGISTRATION DISTRICT—*contd.*				Males.	Females.	Total.														
	KOLÁBA COLLECTORATE—																				
14	Mahád Town, Local Fund ...	6,804	15,892·55	1	75	63	138	138	138	67	64	134	...	...	97·10	...	19·40	...	...	5	0·74
15	Panvel do.	10,351	3,450·33		P. 292 R. 17	297 14	589 31	620	592	370	170	542	31	28	92·02	90·32	55·17	346	33·43	9	0·87
16	Uran do. { Local Fund... / Municipal ...	10,149	1,793·31		P. 28 R. 2	28 1	56 3		56	31	24	56	3	3	100·	100·	5·81	100	9·86	...	...
					P. 104 R. 19	71 1	175 20		175	85	72	188	20	19	96·00	95·00	17·44				
17	Pen do. { Local Fund... / Municipal ...	8,082	52,247·27	1	P. 23 R. 4	17 2	40 6	880	41	30	11	41	6	1	102·50	16·67	5·19	26	3·22	...	...
					P. 147 R. 12	150 7	297 19		301	141	142	289	19	19	97·31	100·	38·11				
					P. 62 R. 5	74 2	136 7		136	61	73	134	7	7	98·53	100·	22·11				
18	Alíbág do. { Local Fund... / Municipal ...	6,376	10,544·29		P. 60 R. 3	58 ...	118 3		118	56	58	116	3	3	98·30	100·	18·66	19	2·98	8	1·25
19	In the 7 Rural Circles ... { Local Fund. / Municipal ...	441,068	245·39	11 ...	P. 7,067 R. 868	6,815 779	13,882 1,647	1,412	13,892	10,369	3,139	13,624	1,650	914	98·14	55·50	32·94	12,074	27·38	190	0·43
					P. 145 R. 7	126 1	271 8	279	271	222	30	252	8	8	92·99	100·	0·59				
	Total ...	482,830	267·76	13	P. 8,003 R. 937	7,699 807	15,702 1,744	1,342	15,720	11,432	3,783	15,346	1,747	1,002	97·73	57·45	33·86	12,565	26·02	212	0·43
	NATIVE STATES—																				
20	Dáng Territory...	60,270	15·70	1	P. 925 R. 15	803 9	1,728 24	1,752	1,728	174	1,162	1,689	24	16	97·74	66·67	28·29	264	4·38	...	...
21	Jawhár	48,556	90·93	1	P. 901 R. 1	837 ...	1,738 1	1,739	1,738	1,105	611	1,738	1	1	100·	100·	35·81	1,736	35·75	...	...
22	Janjira	76,361	234·96	2	P. 1,195 R. 11	1,137 6	2,332 17	1,174	2,339	1,518	743	2,302	17	17	98·71	100·	30·37	2,323	30·42	...	...
	TOTALS BY ESTABLISHMENTS IN WESTERN REGISTRATION DISTRICT.																				
	Cantonment	2,969	...	1	P. 72 R. 1	66 1	138 2	140	138	114	17	131	2	2	94·93	100·	44·80	29	9·77	...	...
	Municipal	104,874	4,923·30	6	P. 2,754 R. 253	2,446 50	5,200 303	917	5,209	3,522	1,234	5,038	303	139	96·88	45·87	49·36	3,964	37·80	106	1·01
	Local Fund	3,200,791	148·59	60	P. 44,448 R. 1,428	42,331 1,086	86,779 2,514	1,488	86,890	55,674	26,713	83,131	2,518	1,462	95·80	58·15	26·42	84,161	26·29	1,673	0·52
	Native States	185,187	39·41	4	P. 3,021 R. 27	2,777 15	5,798 42	1,460	5,805	2,797	2,516	5,729	42	34	98·81	80·95	31·12	4,058	21·91	...	...
	Grand Total ...	3,493,821	132·74	71	P. 50,295 R. 1,709	47,620 1,152	97,915 2,861	1,419	98,042	62,107	30,480	94,029	2,865	1,637	96·03	57·22	27·38	92,212	26·39	1,779	0·51
	THE PRESIDENCY CIRCLE.																				
23	Bombay City (Municipal) ...	773,196	35,145·27	8	P. 9,124 R. 2,079	9,346 507	18,470 2,586	2,632	18,566	14,588	2,939	17,765	2,586	1,639	96·18	63·38	25·10	20,077	25·97	345	0·45

	THE CENTRAL REGISTRATION DISTRICT.																				
	AHMEDNAGAR COLLECTORATE—																				
24	Ahmednagar Town	32,903	75,693·63	1	P. 880 R. 35	879 3	1,759 38	1,797	1,759	1,035	610	1,680	38	29	95·51	76·32	51·94	1,161	35·29	27	0·62
25	Do. Cantonment ...	4,589			P. 112 R. 23	102 4	214 27	241	214	128	74	207	27	17	96·73	62·96	48·81	106	23·10	...	...
26	Sangamner Town, Local Fund.	8,796	14,814·32	...	P. 152 R. 5	193 ...	345 5	350	345	238	92	330	5	5	95·65	100·	38·09	374	42·52	2	0·23
27	In the 11 Rural Circles Local Fund	704,940	105·76	14	P. 15,888 R. 255	15,671 41	31,559 296	2,275	31,562	24,657	5,152	29,989	296	200	95·03	67·57	42·82	26,757	37·96	62	0·09
	Total ...	751,228	112·69	15	P. 17,032 R. 318	16,845 48	33,877 366	2,283	33,880	26,058	5,928	32,206	366	251	95·07	68·58	43·21	28,398	37·80	91	0.12
	POONA COLLECTORATE—																				
28	Poona City	99,622	19,924·40	2	P. 1,598 R. 471	1,393 38	2,991 509	1,750	2,991	1,306	1,597	2,931	509	355	97·99	69·74	32·98	2,956	29·67	110	1·10
29	Poona and Kirkee Cantonments.	37,381	4,255·40	1	P. 957 R. 183	776 12	1733 195	1,928	1,733	1,288	397	1,692	195	124	97·63	63·59	48·58	1,624	43·44	13	0·35
30	Junnar Town, Local Fund ...	10,373	28,492·36	...	220	205	425	425	425	206	205	419	...	...	98·59	...	40·39	165	15·91	...	...
31	In the 8 Rural Circles, Local Fund	753,245	141·23	14	P. 12,610 R. 404	12,500 57	25,110 461	1,826	25,115	14,428	8,936	23,437	461	212	93·34	45·99	31·40	20,635	27·39	338	0·45
	Total ...	900,621	168·41	17	P. 15,385 R. 1,058	14,874 107	30,259 1,165	1,848	30,264	17,228	11,135	28,479	1,165	691	94·12	59·31	32·39	25,380	28·18	461	0·51
	SHOLÁPUR COLLECTORATE—																				
32	Sholápur Town...	59,890	44,987·79	1	P. 1,111 R. 140	1,035 9	2,146 149	2,295	2,146	1,302	729	2,074	149	134	96·64	89·93	36·87	2,125	35·48	30	0·50
33	Bársi do.	16,126	43,002·67	1	375	368	743	743	743	448	191	650	...	...	87·48	...	40·31	675	41·86	7	0·43
34	Pandharpur Town	16,910	33,299·69	1	P. 405 R. 6	437 ...	842 6	848	842	662	145	809	6	3	96·08	50·00	48·02	1,022	60·44	...	...
35	In the 7 Rural Circles. Local Fund .	489,561	108·33	11	P. 10,288 R. 91	10,153 5	20,441 96	1,867	20,461	15,905	3,520	19,486	96	79	95·33	82·29	39·97	20,238	41·35	65	0·13
	Municipal ...	...	...	...	P. 910 R. 52	930 ..	1,840 52	1,892	1,840	1,448	168	1,624	52	27	88·26	51·92	3·37				
	Total ...	582,487	128·83	14	P. 13,089 R. 289	12,923 14	26,012 303	1,880	26,032	19,765	4,753	24,643	303	243	94·74	80·20	42·72	24,060	41·31	102	0·18
	SÁTÁRA COLLECTORATE—																				
36	Karád Town, Local Fund ...	10,778	29,352·85	...	P. 235 R. 1	220 ...	455 1	456	455	314	109	426	1	1	93·63	100·	39·62	19	1·76	5	0·46
37	Wái do. do. ...	11,676	5,838·	...	P. 167 R. 5	170 1	337 6	343	337	235	98	335	6	5	99·41	83·33	29·12	...	...	6	0·51
38	Sátára do.	29,028	35,319·24	1	P. 565 R. 148	460 ...	1,025 148	1,173	1,025	561	296	907	148	139	88·49	93·92	36·03	1,029	35·45	11	0·38
39	In the 12 Rural Circles Local Fund	1,010,868	202·80	18	P. 20,503 R. 511	19,640 37	40,143 548	2,261	40,184	31,551	6,329	37,961	548	382	94·56	69·71	37·93	35,484	35·10	307	0·30
	Total ...	1,062,350	212·98	19	P. 21,470 R. 665	20,490 38	41,960 703	2,245	42,001	32,661	6,832	39,629	703	527	94·44	74·96	37·80	36,532	34·39	329	0.31

Statement No. I, showing Particulars of Vaccination, &c.—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinations.				Re-vaccinations.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE CENTRAL REGISTRATION DISTRICT—*continued.*				Males.	Females.	Total.														
	RATNÁGIRI COLLECTORATE—																				
40	Vengurla Town...	8,947	336,828·24	1	P. 190 R. 3	183 ...	373 3	376	376	247	94	342	3	1	91·69	33·33	38·34	118	13·19	27	3·02
41	Ratnágiri do. Local Fund...	12,616	322,969·60	...	P. 152 R. 19	177 9	329 28	357	329	212	103	316	28	15	96·05	53·57	26·24	343	27·19	17	1·35
42	In the 8 Rural Circles, Local Fund	975,527	248·73	15	P. 17,228 R. 319	16,285 134	33,513 453	2,264	33,568	18,576	13,174	32,491	453	240	96·95	52·98	33·55	26,735	27·41	428	0·44
	Total ...	997,090	254·22	16	P. 17,570 R. 341	16,645 143	34,215 484	2,169	34,273	19,035	13,371	33,149	484	256	96·88	2·89	33·50	27,196	27·28	472	0·47
	NATIVE STATES—																				
43	Akalkot	58,040	116·54	1	P. 1,006 R 8	973 5	1,979 13	1,992	1,989	1,504	343	1,864	13	13	94·19	100·	32·34	1,997	34·71	...	...
44	Modnimb	13,773	154·75	...	330	291	621	621	621	500	96	598	...	...	96·30	...	43·42	471	34·27	...	...
	SÁTÁRA JÁGHI'RS—																				
45	Pant Pratinidhi ...	58,916	131·80	2	P. 1,092 R. 4	1,061 ...	2,153 4	1,078	2,154	751	1,220	1,974	4	4	91·69	100·	33·57	957	16·24	...	...
46	Pant Sachiv	145,876	97·84	3	P. 2,265 R. 5	2,250 ...	4,515 5	1,507	4,515	2,156	2,175	4,435	5	5	98·23	100	30·44	3,186	21·84	...	...
47	Phaltan	58,402	147·11	1	P. 969 R. 2	980 ...	1,949 2	1,951	1,949	1,430	460	1,894	2	2	97·18	100·	32·46	1,558	26·68	...	...
48	Jath	55,493	56·68	1	P. 1,113 R. 1	1,114 ...	2,227 1	2,228	2,227	1,030	990	2,026	1	1	90·97	100·	36·53	1,773	31·96	...	...
	Total ...	318,687	96·16	7	P. 5,439 R. 12	5,405 ..	10,844 12	1,551	10,845	5,367	4,845	10,329	12	12	95·25	100·	32·45	7,474	23·45	...	...
49	Sávantvádi	174,433	193·81	3	P. 2,574 R. 291	2,479 212	5,053 503	1,852	5,121	3,931	881	4,837	503	298	96·12	59·24	29·55	5,817	33·35	...	...
	TOTALS BY ESTABLISHMENTS IN CENTRAL REGISTRATION DISTRICT.																				
	Cantonment	37,381	4,255·40	1	P. 957 R. 183	776 12	1,733 195	1,928	1,733	1,288	397	1,692	195	124	97·63	63·59	48·58	1,613	43·15	13	0·34
	Municipal	268,015	31,318·17	8	P. 6,146 R. 878	5,787 54	11,933 932	1,608	11,936	7,137	3,904	11,224	932	705	94·90	75·64	44·51	11,216	41·85	242	0·90
	Local Fund	3,988,380	156·85	72	P. 77,443 R. 1,610	75,214 284	152,657 1,894	2,147	152,781	106,322	37,718	145,190	1,894	1,139	95·11	60·14	36·69	128,737	32·28	12,00	0·30
	Native States	504,933	117·52	11	P. 9,349 R. 311	9,148 217	18,497 528	1,730	18,576	11,302	6,165	17,648	528	323	95·41	61·17	31·81	15,760	27·90	...	...
	Grand Total ...	4,858,709	160·61	92	P. 93,895 R. 2,982	90,925 567	184,820 3,549	2,047	185,026	126,049	48,184	175,754	3,549	2,291	95·09	64·55	36·64	157,326	32·38	1,455	0·30

	THE SOUTHERN REGISTRATION DISTRICT.																					
	BELGAUM COLLECTORATE—																					
50	Gokák Town Local Fund ...	10,307	26385·92	...	36	42	78	78	78	21	57	78	...	...	100·	...	7·57	...	...	4	0·39
51	Athní do.	11,186	12195·98	1	P. 197 R. 22	185 1	382 23	405	382	291	85	376	23	15	98·43	65·22	34·95	191	17·07	4	0·36
52	Belgaum do.	23,115	51188·93	1	P. 608 R. 9	590 ...	1,198 9	1,368	1,198	774	357	1,133	9	3	94·57	33·33	49·14	930	40·23	43	1·86
53	Do. Cantonment	9,582	...	...	P. 78 R. 1	82 ...	160 1		160	120	34	154	1	...	96·25	...	16·07	249	25·99	3	0·31
54	In the 7 Rural Circles. Local Fund ...	809,824	173·97	15	P. 12,883 R. 958	12,474 200	25,357 1,158	1,768	25,370	14,246	10,297	24,703	1,158	811	97·42	70·03	31·52	24,363	30·10	567	0·70
	In the 7 Rural Circles. Native State ...				13	4	17	17	17	14	3	17	...	...	100·	...	100·				
	Total ...	864,014	185·54	17	P. 13,815 R. 990	13,377 201	27,192 1,191	1,669	27,205	15,466	10,833	26,461	1,191	829	97·31	69·61	31·59	25,733	29·78	621	0·72
	DHÁRWÁR COLLECTORATE—																					
55	Dhárwar Town...	27,191	23676·52	1	P. 594 R. 47	605 3	1,199 50	1,249	1,199	750	350	1,122	50	30	93·58	60·00	42·33	1,236	45·46	18	0·66
56	Hubli do.	36,677	31090·44	1	P. 497 R. 11	532 ...	1,029 11	1,040	1,029	672	294	970	11	4	94·27	36·36	26·56	1,440	39·26	23	0·63
57	Gadag-Bettigeri Town	17,001	61127·19	1	P. 549 R. 34	549 4	1,098 38	1,136	1,098	749	315	1,070	38	24	97·45	63·16	64·35	1,256	73·88	12	0·71
58	Ranebennur do. Local Fund.	10,202	27666·44	...	P. 258 R. ...	266 1	524 1	525	524	282	216	504	1	1	96·18	100·	49·50	1,048	102·72	6	0·59
59	In the 14 Rural Circles. Local Fund ...	791,836	174·73	17	P. 13,433 R. 892	13,299 115	26,732 1,007	1,632	26,795	16,157	8,915	25,297	1.007	487	94·63	48·36	32·56	22,852	28·86	654	0·83
	In the 14 Rural Circles. Native State ...				P. 440 R. 54	476 6	916 60	976	916	577	287	879	60	51	95·96	85·00	1·17				
	Total ...	882,907	194·70	20	P. 15,771 R. 1,038	15,727 129	31,498 1,167	1,663	31,561	19,187	10,377	29,842	1,167	597	24·74	51·16	34·48	27,832	31·52	713	0·81
	PIJÁPUR COLLECTORATE—																					
60	BijapurTown Local Fund ...	11,424	5372·05	1	P. 459 R. 24	453 5	912 29	941	912	437	415	882	29	7	96·71	24·14	77·82	...	...	...	...
	BijapurTown Municipal ...				P. 31 R. ...	35 2	66 2	68	66	27	33	65	2	2	98·48	100·	5·86				
61	Bagalkot do.	12,850	42174·36	1	P. 588 R. 86	606 3	1,194 89	1,283	1,194	795	337	1,132	89	48	94·81	53·93	91·83	1,056	82·18	...	...
62	Kaládgi do. Local Fund ...	7,024	59938·13	...	48	44	92	92	92	45	31	76	...	...	82·61	...	10·82	85	12·10	7	1·00
63	In the 8 Rural Circles. Local Fund ...	607,195	105·51	11	P. 10,967 R. 2,620	10,789 875	21,756 3,495	2,996	21,756	12,821	7,779	20,762	3,495	2,521	95·43	72·13	38·35	18,969	31·24	497	0·82
	In the 8 Rural Circles. Native State ...				P. 9 R. 2	8 ...	17 2	19	17	12	5	17	2	1	100·	50·00	0·02				
	Total ...	638,493	110·90	13	P. 12,102 R. 2,732	11,935 885	24,037 3,617	2,127	24,037	14,137	8,600	22,934	3,617	2,579	95·41	71·30	39·96	20,110	31·50	504	0·79
	KÁNARA COLLECTORATE—																					
64	Kárwár Town	13,761	1169·44	1	P. 243 R. 60	194 2	437 62	499	438	130	212	347	62	33	79·41	53·23	27·61	533	38·73	3	0·22
65	Kumta do. Local Fund ...	10,629	1445·82	...	P. 130 R. 3	116 1	246 4	250	246	143	53	199	4	1	80·89	25·00	18·82	283	26·63	31	2·92
66	In the 11 Rural Circles, Local Fund.	397,450	102·13	13	P. 5,868 R. 785	5,500 441	11,368 1,226	969	11,382	2,932	5,812	10,453	1,227	858	91·95	69·98	28·46	9,606	24·17	335	0·84
	Total ...	421,840	107.87	14	P. 6,241 R. 848	5,810 444	12,051 1,292	953	12,066	3,205	6,077	10,999	1,293	892	91·27	69·04	28·19	10,422	24·70	369	0·87

Statement No. I., showing Particulars of Vaccination, &c.—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons Vaccinated.			Average Number of Persons Vaccinated by each Vaccinator.	Primary Vaccinations.				Re-vaccinations.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE SOUTHERN REGISTRATION DISTRICT—*continued.*				Males.	Females.	Total.														
	SOUTHERN MARÁTHA JÁGHIRS—																				
67	Sángli	196,832	219·68	6	P. 2,821 R. 70	2,799 18	5,620 88	951	5,620	3,066	1,952	5,045	88	81	89·77	92·05	26·04	4,112	20·89	...	...
68	Jamkhandi	83,917	170·56	2	P. 1,824 R. 70	1,799 36	3,623 106	2,309	3,623	2,451	1,076	3,562	106	89	98·32	83·96	43·51	3,471	41·36	...	...
69	Miraj (Senior)	55,959	222·94	2	P. 1,047 R. 42	1,065 10	2,112 52	1,082	2,118	1,385	621	2,006	52	49	94·98	94·23	36·72	1,894	33·84	...	...
70	Do. (Junior)	30,541	146·83	1	P. 321 R. 4	336 3	657 7	664	660	319	298	617	7	3	93·91	42·86	20·30	550	18·01	...	...
71	Kurundvád (Elder)	35,187	193·33	1	P. 468 R. 188	434 43	902 231	1,133	902	393	456	850	231	179	94·23	77·49	29·24	971	27·60	...	...
72	Do. (Younger).. ...	25,811	226·41	1	P. 293 R. 10	300 4	593 14	607	593	282	275	557	14	1	93·93	7·14	21·62	827	32·04	...	...
73	Mudhol	52,163	144·10	1	P. 873 R. 145	867 23	1,740 168	1,908	1,740	1,263	460	1,729	168	108	99·37	64·29	35·22	1,933	37·06	...	...
74	Rámdurg	29,570	211·21	1	P. 570 R. 41	604 ...	1,174 41	1,215	1,174	695	405	1,105	41	11	94·12	26·88	37·74	1,006	34·02	...	...
	Total ...	509,980	192·81	15	P. 8,217 R. 570	8,204 137	16,421 707	1,142	16,430	9,854	5,543	15,471	707	521	94·21	73·69	31·36	14,764	28·95	...	...
	UNDER THE DHÁRWÁR AGENCY—																				
75	Sávanur State	14,763	210·90	1	P. 248 R. 6	245 2	493 8	501	493	316	145	464	8	5	94·12	62·50	31·77	1,122	76·00	...	...
76	KOLHÁPUR STATES	800,189	284·16	13	P. 13,546 R. 1,480	13,126 160	26,672 1,640	2,178	26,750	17,866	7,758	25,769	1,640	1,185	96·61	72·26	33·68	23,842	29·80	...	...
	TOTALS BY ESTABLISHMENTS IN SOUTHERN REGISTRATION DISTRICT.																				
	Municipal	151,363	9,432·55	8	P. 3,385 R 270	3,378 15	6,763 285	881	6,764	4,308	2,017	6,369	285	159	94·17	55·79	43·13	6,986	46·15	154	1·02
	Local Fund	2,655,891	140·95	56	P. 44,082 R. 5,282	42,983 1,638	87,065 6,920	1,678	87,155	47,084	33,575	82,054	6,921	4,686	95·28	67·72	33·00	77,111	29·03	2,053	0·77
	Native State	1,324,932	239·55	29	P. 22,473 R. 2,112	22,063 305	44,536 2,417	1,619	44,623	28,639	13,741	42,617	2,417	1,763	95·69	72·94	33·49	39,727	29·98	...	...
	Grand Total ...	4,132,186	169·42	93	P. 69,940 R. 7,664	68,424 1,958	138,364 9,622	1,591	138,542	80,031	49,333	131,940	9,623	6,608	95·36	68·67	33·53	123,824	29·97	2,207	0·53
	THE EASTERN GUJARÁT REGISTRATION DISTRICT.																				
	SURAT COLLECTORATE—																				
77	Bulsár Town	13,229	5,291·60	...	.....	...	...	*Vide*	Statement	No.	III.	...	...	...	...	...	...	...	...	2	0·15.
78	Surat do.	109,844	36,614·66	2	P. 1,549 R. 114	155 3	3,074 117	1,595	3,074	2,593	439	3,036	117	32	98·76	27·35	27·93	3,144	28·61	176	1·60
79	In the 8 Rural Circles, Local Fund	491,125	296·39	9	P. 9,135 R. 243	8,877 64	18,012 307	2,025	18,046	12,823	4,485	17,538	307	202	97·37	65·80	36·12	14,889	30·31	134	0·27
	Total ...	614,198	369·44	11	P. 10,684 R. 357	10,402 67	21,086 424	1,955	21,120	15,416	4,924	20,574	424	234	97·57	55·19	33·88	18,033	29·35	312	0·50

	BROACH COLLECTORATE—																						
80	Broach City	37,231	22133·43	1	P. 650 R. 31	559 2	1,209 33	1,242	1,209	938	203	1,146	33	17	94·79	51·52	31·22	1,172	31·25	21	0·56
81	Jambusar Town, Local Fund...	11,479	21110·80	...	P. 182 R. 1	172 ...	354 1	355	355	264	74	339	1	1	95·76	100	29·62	299	25·96	...	...
82	In the 6 Rural Circles, Local Fund	278,170	191·73	5	P. 4,681 R. 378	4,406 87	9,087 465	1,910	9,127	7,026	1,754	8,826	469	258	97·13	55·48	32·66	9,165	32·97	16	0·05
	Total ...	326,930	224·99	6	P. 5,513 R. 410	5,137 89	10,650 499	1,858	10,691	8,228	2,031	10,311	503	276	96·82	55·31	32·38	10,636	32·52	37	0·11
	KAIRA COLLECTORATE—																						
83	Kapadvanj Town	14,442	63307·40	...	.....	...	...	*Vide*	Statem	ent No.	III.	...	...	...	...	...	...	...	...	9	0·62
84	Nadiád do.	28,304	85044·88	1	P. 514 R. 30	396 ...	910 30	940	910	719	145	866	30	9	95·16	30·00	30·91	964	34·05	1	0·04
85	Borsad Town, Local Fund ...	12,228	64146·89	...	P. 224 R. 3	202 ...	426 3	429	429	381	40	424	3	3	99·53	100·	34·91	100	8·09	2	0·16
86	Kaira do. do. ...	12,640	44942·22	...	P. 121 R. ...	116 1	237 1	238	238	175	55	231	1	...	97·43	...	18·28	329	26·02	1	0·07
87	In the 7 Rural Circles, Local Fund	737,186	458·57	10	P. 12,994 R. 115	10,746 7	23,740 122	2,386	23,780	18,970	4,246	23,298	122	79	98·14	64·75	31·71	22,068	29·93	45	0·06
	Total ...	804,800	500·31	11	P. 13,853 R. 148	11,460 8	25,313 156	2,315	25,357	20,245	4,486	24,819	156	91	98·05	58·33	30·95	23,461	29·15	58	0·07
	PANCH MAHÁLS—																						
88	Godhra Town, Local Fund ...	13,342	79802·62	...	P. 268 R. 46	241 6	509 52	561	509	410	96	509	52	37	100·	71·15	40·92	380	28·48	6	0·45
89	Dohad do. do. ...	12,394	74132·64	...	P. 159 R. 42	156 12	315 54	369	318	199	100	305	54	32	96·83	59·26	27·20	412	33·24	3	0·24
90	In the 5 Rural Circles, Local Fund	229,743	142·43	6	P. 3,749 R. 140	3,613 74	7,362 214	1,263	7,373	4,623	2,340	7,135	214	152	96·92	71·03	31·72	8,458	36·81	22	0·09
	Total ...	255,479	158·35	6	P. 4,176 R. 228	4,010 92	8,186 320	1,418	8,200	5,232	2,536	7,949	320	221	97·10	69·06	31·98	9,250	36·20	31	0·12
	AHMEDABAD COLLECTORATE—																						
91	Dholka Town	17,716	23621·33	1	P. 388 R. 109	385 5	773 114	887	773	713	38	755	114	104	97·67	91·23	48·49	668	37·70	1	0·05
92	Ahmedabad City	124,767	57722·57	2	P. 2,267 R. 40	2,155 5	4,422 45	2,233	4,433	3,682	656	4,356	45	39	98·51	86·67	35·23	4,186	33·13	1	0·01
93	Ahmedabad Cantonment ...	2,854	...	...	16	19	35	35	35	24	9	33	...	...	94·29	...	11·56	44	15·41	...	...
	Do. do. Local Fund				63	53	116	116	118	74	31	105	...	...	90·52	...	36·79				
94	Gogha Town, Local Fund ...	7,063	9417·33	...	P. 160 R. 4	168 1	328 5	333	331	238	53	292	5	3	89·02	60·00	41·77	264	37·23	2	0·28
95	Viramgám Town, do. ...	18,990	30925·19	..	P. 270 R. 1	290 ...	560 1	561	561	419	138	558	1	1	99·64	100·	29·44	588	30·91	4	0·21
96	In the 7 Rural Circles, Local Fund	684,934	179·45	12	P. 12,582 R. 262	11,886 35	24,468 297	2,064	24,500	20,112	3,851	24,014	297	211	98·14	71·04	35·37	22,169	32·43	66	0·10
	Total ...	856,324	224·10	15	P. 15,746 R. 416	14,956 46	30,702 462	2,078	30,751	25,262	4,776	30,113	462	358	98·08	77·49	35·58	27,919	32·60	74	0·09
97	Rewa Kántha States	543,452	113·41	13	P. 9,482 R. 138	8,781 54	18,263 192	1,420	18,311	7,819	9,161	17,809	193	145	97·51	75·52	33·04	17,612	32·40	...	...
98	Mahi Kántha States	517,485	46·84	8	P. 7,752 R. 41	7,156 24	14,908 65	1,872	14,932	10,870	3,865	14,756	65	56	98·98	86·15	28·62	11,950	23·09	...	...
99	Cambay	86,074	245·93	1	931	806	1,737	1,737	1,749	1,154	515	1,675	...	...	96·43	...	19·46	1,735	20·15	...	...
100	Surat Agency . Dharampor...	101,289	127·57	2	P. 2,628 R. 2	2,536 ...	5,164 2	2,583	5,166	1,253	3,213	4,963	2	2	96·11	100·	49·02	3,085	30·44	...	...
101	Surat Agency . Bánsda ...	34,122	88·86	1	P. 652 R. 8	650 ...	1,302 8	1,310	1,305	810	439	1,289	8	7	99·00	87·50	37·98	1,320	38·68	...	...
102	Surat Agency . Sachin Local Fund ...	15,721	374·31	...	P. 193 R. ...	185 1	378 1	379	378	238	114	353	1	...	93·39	...	22·45	468	29·76	...	...
103	Jámbughoda Local Fund ..	6,440	45·03	...	P. 260 R. ...	250 2	510 2	512	511	163	337	501	2	2	98·24	100·	78·11	148	22·98	...	...

Statement No. I., showing Particulars of Vaccination, &c.—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1891.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinations.				Re-vaccinations.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	TOTALS BY ESTABLISHMENTS IN EASTERN GUJARÁT REGISTRATION DISTRICT.				Males.	Females.	Total.														
	Municipal	320,766	40205·69	7	P. 5,368 R. 324	5,020 15	10,388 339	1,532	10,399	8,645	1,481	10,159	339	201	97·80	59·29	32·30	10,254	32·07	229	0·71
	Local Fund	2,559,126	247·60	42	P. 45,041 R. 1,235	41,361 290	86,402 1,525	2,093	86,574	66,115	17,714	84,428	1,529	981	97·72	64·33	33·37	79,617	31·14	283	0·11
	Native State	1,282,422	73·84	25	P. 21,445 R. 189	19,929 78	41,374 267	1,666	41,463	21,906	17,193	40,492	268	210	97·87	78·65	31·74	35,703	27·84	...	...
	Cantonment	...	...	...	16	19	35	35	35	24	9	33	...	...	94·29	...	11·56	44	15·41	...	...
	Grand Total ...	4,162,314	150·20	74	P. 71,870 R. 1,748	66,329 383	138,199 2,131	1,896	138,471	96,690	36,397	135,112	2,136	1,392	97·77	65·32	32·80	125,618	30·17	512	0·12
	THE WESTERN GUJARÁT CIRCLE—KÁTHIÁWÁR STATES.																				
104	Jhálávád Pránt. Limbdi	43,063	153·80	1	P. 1,208 R. 321	1,232 204	2,440 525	2,965	2,440	1,785	491	2,294	525	432	94·02	82·29	63·30	2,273	52·78	...	...
105	Jhálávád Pránt. Dhrángadra	99,686	87·29	1	P. 1,289 R. 59	1,284 36	2,573 95	2,668	2,573	1,678	817	2,517	95	80	97·82	84·21	26·05	2,415	24·22	...	...
106	Jhálávád Pránt. In 4 other States ...	296,880	103·44	4	P. 4,897 R. 576	4,627 424	9,524 1,000	2,631	9,566	5,530	3,101	8,669	1,000	621	91·02	62·10	31·29	10,596	35·69	...	...
	Total ...	439,629	102·43	6	P. 7,394 R. 956	7,143 664	14,537 1,620	2,693	14,579	8,993	4,409	13,480	1,620	1,133	92·73	69·94	33·24	15,284	34·77	...	...
107	Hálár Pránt. Rájkot ...	61,809	229·77	1	P. 884 R. 133	805 29	1,689 162	2,010	1,695	1,159	457	1,623	162	162	96·09	100·	28·88	2,725	44·09	...	...
108	Hálár Pránt. Do. Cantonment...	6,013	2696·41		P. 79 R. 11	59 10	138 21		138	74	58	132	21	20	96·39	95·23	25·28	165	27·44	...	..
109	Hálár Pránt. Gondal	135,604	197·41	2	P. 2,767 R. 437	2,558 281	5,325 718	3,021	5,326	3,379	1,429	4,842	718	326	90·93	45·40	38·11	4,575	33·74	...	..
110	Hálár Pránt. Morvi	89,964	121·57	1	P. 1,329 R. 137	1,346 116	2,675 253	2,928	2,680	1,938	512	2,465	253	190	92·15	75·10	29·51	2,540	31·57	...	...
111	Hálár Pránt. Navánagar	316,147	93·16	3	P. 4,256 R. 494	4,196 329	8,452 823	3,092	8,455	4,289	3,003	7,374	823	499	87·24	60·63	24·90	7,475	23·65	...	...
112	Hálár Pránt. In 3 other States ...	74,790	207·13	3	P. 3,929 R. 209	3,734 146	7,663 355	2,673	7,670	4,628	2,498	7,132	355	247	93·07	69·58	98·66	7,499	100·24	...	...
	Hálár Pránt. Total ...	684,327	116·93	10	P. 13,244 R. 1,421	12,698 911	25,942 2,332	2,827	25,964	15,467	7,957	23,568	2,332	1,444	90·85	61·92	36·55	25,279	36·94	...	...

113	Sorath Pránt.	Junágad	387,499	101·97	4	P. 4,293	4,146	8,439	2,232	8,463	3,995	3,352	7,457	490	250	88·36	51·02	19·69	7,831	20·1	...	...
114		Jetpur	92,553	165·27	1	R. 268	222	490														
115		Porbandar	71,072	125·42	1	P. 1,185	1,140	2,325	2,423	2,328	1,151	817	1,979	98	65	85·12	66·32	22·08	2,025	21·88	...	...
116		Bántva	38,517	189·46	1	R. 53	45	98														
117		In 4 other States ...	50,139	196·74	4	P. 1,273	1,288	2,561	2,359	2,561	1,197	919	2,157	298	125	84·22	41·94	32·18	1,887	26·33	...	...
						R. 153	145	298														
						P. 1,244	1,205	2,449	2,954	2,449	1,002	1,299	2,370	505	399	96·77	79·00	70·74	2,983	37·45	...	...
						R. 314	191	505														
						P. 4,898	4,872	9,770	2,615	9,791	4,831	4,183	9,112	692	486	93·26	70·33	19·14	9,235	184·18	...	...
						R. 382	309	691														
		Total ...	639,780	118·81	11	P. 12,893	12,651	25,544	2,511	25,592	12,176	10,570	23,075	2,083	1,325	90·33	63·64	38·13	23,961	37·46	...	...
						R. 1,170	912	2,082														
118	Gohelvád Pránt.	Bhávnagar	420,708	147·10	6	P. 6,773	6,490	13,263	2,316	13,290	7,312	4,451	11,887	631	306	89·62	48·49	28·98	13,404	31·86	...	...
						R. 346	285	631														
119		Pálitána	62,122	203·68	1	P. 976	976	1,952	2,368	1,952	1,101	603	1,711	416	161	87·65	38·70	30·13	1,722	27·70	...	...
						R. 218	198	416														
120		Vala	68,296	151·10	1	P. 768	733	1,501	1,848	1,501	864	349	1,216	347	96	81·01	27·66	19·21	1,644	24·07	...	...
						R. 197	150	347														
121		Jasdan	29,037	263·97	1	P. 1,074	1,010	2,084	2,314	2,084	757	1,079	1,861	230	123	89·29	53·47	68·32	1,784	61·44	...	...
						R. 124	106	230														
		Total ...	580,163	155·66	9	P. 9,591	9,209	18,800	2,269	18,827	10,034	6,482	16,675	1,624	686	88·69	42·24	29·92	18,554	31·98	...	...
						R. 885	739	1,624														
	Káthiáwár States, Total ...		2,343,899	147·69	36	P. 43,122	41,701	84,823	2,569	84,962	46,670	29,418	76,798	7,659	4,588	90·53	59·91	34·72	83,079	35·44	...	...
						R. 4,432	3,226	7,658														
	PÁLANPUR STATES—																					
122	Deesa		49,821	57·66	1	P. 974	925	1,899	2,133	1,899	1,280	471	1,752	62	55	92·25	88·70	36·29	2,039	40·92	...	...
						R. 38	24	62														
123	Do. Cantonment		8,376	33295·90		P. 96	72	168		168	87	59	146	4	4	86·90	100·00	17·90	272	32·72	...	...
						R.	4	4														
124	Pálanpur		184,581	80·75	3	P. 4,404	4,152	8,556	2,960	8,559	4,244	3,558	7,887	325	265	92·18	91·53	44·18	5,276	28·58	...	...
						R. 165	160	325														
125	Rádhanpur		98,129	85·33	2	P. 2,397	2,331	4,728	2,503	4,728	2,647	1,967	4,641	278	237	98·15	85·25	49·70	2,282	23·25	...	...
						R. 140	138	278														
126	In 3 other States		235,571	63·67	3	P. 4,122	3,898	8,020	2,948	8,020	5,443	2,032	7,544	823	595	94·06	72·29	35·36	8,388	35·60	...	...
						R. 350	473	823														
	Total ...		576,478	72·06	9	P. 11,993	11,378	23,371	2,763	23,374	13,701	8,087	21,970	1,492	1,156	94·00	77·47	40·28	18,257	31·67	...	...
						R. 693	799	1,492														
	TOTALS BY ESTABLISHMENTS IN WESTERN GUJARÁT CIRCLE.																					
	Government		126,019	110·98	2	P. 2,033	1,861	3,894	2,071	3,900	2,600	1,045	3,653	249	241	93·81	96·78	30·90	5,201	41·27	...	...
						R. 182	67	249														
	Native State		2,794,358	106·98	43	P. 53,082	51,218	104,300	2,633	104,436	57,771	36,460	95,115	8,902	5,503	91·19	61·82	36·00	96,135	34·40	...	...
						R. 4,943	3,958	8,901														
	Grand Total ...		2,920,377	107·14	45	P. 55,115	53,079	108,194	2,608	108,336	60,371	37,505	98,768	9,151	5,744	91·29	62·77	35·78	101,336	34·70	...	...
						R. 5,125	4,025	9,150														
	THE SIND REGISTRATION DISTRICT.																					
	KARÁCHI COLLECTORATE—																					
127	Karáchi Town		68,332	3,416·60	2	P. 1,924	1,797	3,721	1,939	3,772	3,175	354	3,701	163	102	99·46	64·97	55·65	4,714	68·99	23	0·33
						R. 135	22	157														
128	In the 14 Rural Circles, Local Fund		410,356	29·11	10	P. 6,093	5,353	11,461	1,349	11,474	7,849	2,927	10,883	2,047	1,412	95·08	68·98	29·96	13,774	33·57	133	0·32
						R. 864	1,183	2,047														
	Total ...		478,688	33·91	12	P. 8,017	7,150	15,167	1,448	15,246	11,024	3,281	14,584	2,210	1,514	96·16	68·69	33·63	18,488	38·62	156	0·33
						R. 999	1,205	2,204														

Statement No. I., showing Particulars of Vaccination, &c.—*continued.*

Number.	Circles and Districts.	Population of Districts according to Census of 1881.	Average Population per Square Mile.	Average Number of Vaccinators employed throughout the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccinations.				Re-vaccinations.		Percentage of Successful Cases.		Persons successfully vaccinated per 1,000 of Population.	Average Annual Number of Persons successfully vaccinated during previous five years.		Average Annual Number of Deaths from Small-pox during previous five years.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.		Number.	Ratio per 1,000.	Number.	Ratio per 1,000.
										Under 1 year.	Over 1 and under 6 years.	Total of all Ages.									
1	2	3	4	5	6			7	8	9	10	11	12	13	14	15	16	17	18	19	20
	THE SIND REGISTRATION DISTRICT—*continued.*				Males.	Females.	Total.														
	HYDERABAD COLLECTORATE—																				
129	Hyderabad Town	45,195	...	1	P 821 R. 502	669 ...	1,490 502	1,992	1,490	1,199	280	1,490	502	438	100·00	87·25	42·66	1,803	39·90	51	1·15
130	In the 13 Rular Circles, Local Fund	709,429	78·57	13	P. 11,289 R. 1,338	9,536 969	20,825 2,307	1,779	20,850	14,707	4,827	19,704	2,307	1,523	94·62	66·02	29·92	21,138	29·78	258	0·04
	Total ...	754,624	83·57	14	P. 12,110 R. 1,840	10,205 969	22,315 2,809	1,795	22,340	15,906	5,107	21,194	2,809	1,961	94·98	69·81	30·68	22,941	30·40	309	0·04
	THAR AND PÁRKAR—																				
131	Umarkot Town, Local Fund ...	2,828	...	...	.....	...	...	...	...	...	...	...	...	...	...	...	...	39	13·79	...	...
132	In the 7 Rular Circles, do. ...	200,516	15·75	7	P. 5,076 R. 714	4,216 1,529	9,292 2,243	1,648	9,310	5,025	3,824	9,030	2,243	1,762	97·18	78·56	53·82	2,163	17·69	15	0·07
	Total ...	203,344	15·97	7	P. 5,076 R. 714	4,216 1,529	9,292 2,243	1,648	9,310	5,025	3,824	9,030	2,243	1,762	97·18	78·56	53·07	2,202	10·83	15	0·07
	SHIKÁRPUR COLLECTORATE—																				
133	Shikárpur Town	42,496	4,473·26	1	P. 692 R. 834	647 1	1,339 835	2,174	1,342	1,101	113	1,220	835	551	91·11	65·99	41·67	1,603	37·72	7	0·16
134	Sukkur do.	27,389	9,129·66	2	P. 816 R. 270	841 321	1,657 591	1,124	1,657	1,089	423	1,531	591	356	92·40	60·24	68·90	2,364	86·30	7	0·27
135	Lárkhána do	13,188	2,198·	1	P. 274 R. 46	267 6	541 52	593	542	419	75	499	52	30	92·24	57·69	40·11	466	35·32	...	...
136	Rohri do.	10,224	58,422·86	1	P. 184 R. 61	138 2	322 63	385	324	245	16	262	63	17	81·37	26·98	27·29	42	4·11	...	...
137	In the 14 Rular Circles, Local Fund	739,689	75·48	16	P. 13,735 R. 1,816	12,320 3,610	26,055 5,426	1,968	26,178	22,026	2,760	24,923	5,432	3,212	95·66	59·20	38·04	27,380	35·67	59	0·08
	Total ...	832,986	84·92	21	P. 15,701 R. 3,027	14,213 3,940	29,914 6,967	1,756	30,043	24,880	3,387	28,435	6,973	4,166	95·06	59·80	39·14	31,855	38·24	73	0·09
	UPPER SIND FRONTIER—																				
138	Jacobabad Town and Cantonment, Local Fund	11,352	...	...	P. 80 R. 22	116 ...	196 22	218	196	158	33	194	22	19	99·00	86·36	18·76	34	0·30	1	0·09
139	In the 4 Rural Circles, Local Fund	132,829	56·99	4	P. 3,067 R. 575	2,807 1,255	5,874 1,830	1,926	5,891	4,074	1,089	5,223	1,830	1,158	88·91	63·28	48·04	6,356	47·85	9	0·07
	Total ...	144,181	61·86	4	P. 3,147 R. 597	2,923 1,255	6,070 1,852	1,980	6,087	4,232	1,122	5,417	1,852	1,177	89·24	63·55	54·73	6,390	44·32	10	0·07
	NATIVE STATE—																				
140	Khairpur State...	129,153	21·14	3	P. 1,584 R. 20	1,331 4	2,915 24	980	2,915	1,983	719	2,875	24	21	98·63	87·50	22·42	3,556	27·53	...	...

	TOTALS BY ESTABLISHMENTS IN SIND REGISTRATION DISTRICT.																					
	Municipal	206,824	5,347·74	8	P. 4,711 R. 1,848	4,359 352	9,070 2,200	1,409	9,127	7,228	1,261	8,703	2,206	1,494	95·95	67·91	49·30	10,993	53·15	89	0·44
	Local Fund	2,206,999	46·00	50	P. 39,340 R. 5,329	34,348 8,546	73,688 13,875	1,751	73,899	53,839	15,460	69,957	13,881	9,086	94·94	65·48	35·81	80,790	36·61	474	0·21
	Native State	129,153	21·14	3	P. 1,584 R. 20	1,331 4	2,915 24	980	2,915	1,983	719	2,875	24	21	98·63	87·50	22·42	3,555	27·53	...	...
	Grand Total ...	2,542,976	46·99	61	P. 45,635 R. 7,197	40,038 8,902	85,673 16,099	1,668	85,941	63,050	17,440	81,535	16,111	10,601	95·17	65·85	36·23	95,338	37·49	563	0·22
	THE BARODA CIRCLE.																					
141	Baroda States	2,185,005	254·96	31	P. 37,445 R. 715	34,355 177	71,800 892	2,345	71,915	60,562	8,413	69,280	895	717	96·49	80·38	32·03	64,106	29·30	...	...
	THE CUTCH CIRCLE.																					
142	Cutch States...	*512,084	78·78	17	P. 11,385 R. 123	11,080 118	22,465 241	1,336	22,512	15,377	6,627	22,365	241	221	99·56	91·70	44·11	20,419	39·87	...	...
	ADEN.																					
143	Aden Municipality...	34,860	3,005·17	2	P. 586 R. 4	364 1	950 5	477	950	83	420	950	5	5	100·	100·	27·37	499	14·31	...	...
144	Khelat	...	...	...	P. 21 R. 5	15 ...	36 5	41	36	6	28	36	5	5	100·	100·	...	196	...	...	...
145	Quetta	—	...	...	P. 449 R. 37	401 27	850 64	914	850	203	442	809	64	52	95·17	81·25	...	...	...	...	...
	TOTAL OF THE BOMBAY PRESIDENCY. BY ESTABLISHMENTS.																					
	Government	126,019	110·98	2	P. 2,033 R. 182	1,861 67	3,894 249	2,071	3,900	2,600	1,045	3,653	249	241	93·81	96·78	30·90	5,201	41·27	...	...
	Municipal	1,859,898	14,743·27	47	P. 32,074 R. 5,656	30,700 994	62,774 6,650	1,477	62,951	45,511	13,256	60,208	6,656	4,342	95·91	65·30	34·76	64,031	34·97	1,165	0·62
	Cantonment	40,350	4,593·38	2	P. 1,045 R. 184	861 13	1,906 197	1,051	1,906	1,426	423	1,856	197	126	97·37	63·96	49·12	1,642	40·69	13	0·32
	Local Fund	14,611,187	117·64	280	P. 250,803 R. 14,921	236,638 11,871	487,441 26,792	1,837	488,149	329,237	131,622	466,469	26,807	17,406	95·70	64·97	33·11	450,415	30·83	5,683	0·39
	Native State	8,978,074	112·64	163	P. 159,805 R. 8,445	151,916 4,872	311,721 13,317	1,994	312,281	200,343	91,862	296,157	13,322	8,797	98·00	66·06	33·96	279,662	31·15	...	...
	In British Territory ...	16,503,663	132·95	330	P. 283,644 R. 20,772	267,895 12,889	551,539 33,661	1,773	552,423	375,934	144,967	527,957	33,682	21,896	95·72	60·50	33·32	515,645	31·24	6,861	0·42
	In Native State Territory.	9,111,865	112·46	164	P. 162,116 R. 8,616	154,081 4,928	316,197 13,544	2,011	316,764	203,163	93,241	300,386	13,549	9,016	94·99	66·57	33·96	285,306	31·31	...	...
	GRAND TOTAL ...	25,615,528	124·86	494	P. 445,760 R. 29,388	421,976 17,817	867,736 47,205	1,852	869,187	579,117	238,208	828,343	47,231	30,912	95·47	65·48	33·54	800,951	31·27	6,861	0·27

STATEMENT No. II., showing the Cost of the Department

No.	Circles and Districts.	Establishment.																		
		Deputy Sanitary Commissioners.	Superintendents of Vaccination.	Inspectors of Sanitation and Vaccination.			Assistant Superintendents of Vaccination.			Clerks and Kárkúns.	Vaccinators.									Havildárs and Peons.
														Local Fund.						
				1st Class.	2nd Class.	3rd Class.	1st Class.	2nd Class.	3rd Class.		Government.	Municipal.	Cantonment.	1st Class.	2nd Class.	3rd Class.	Candidates.	Native States.		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19		20
	THE WESTERN REGISTRATION DISTRICT.																			
	Administrative Charges	1	...	1	1	4	...	...	...	2	...	...	...	...	...	...	...	...		10
1	Khándesh Collectorate	...	...	...	...	...	...	...	...	...	...	1	...	1	7	17	...	1		26
2	Násik do.	...	...	...	...	...	...	...	...	...	...	1	1	1	5	6	...	...		13
3	Thána do.	...	...	...	...	...	...	...	...	...	...	2	...	1	5	6	1	1		14
4	Kolába do.	...	...	...	...	...	...	...	...	...	...	2	...	1	3	7	1	2		12
	Total ...	1	...	1	1	4	...	...	...	2	...	6	1	4	20	36	2	4		75
	THE PRESIDENCY CIRCLE.																			
	Administrative Charges	...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...
5	Bombay	...	...	...	...	...	1	...	...	17	...	9	...	...	...	...	...	...		3
	Total ...	...	1	...	...	...	1	...	...	17	...	9	...	...	...	...	...	...		8
	THE CENTRAL REGISTRATION DISTRICT.																			
	Administrative Charges	1	...	1	1	4	...	...	...	2	...	...	...	...	...	...	...	...		10
6	Ahmednagar Collectorate	...	...	...	...	...	...	...	...	...	...	1	...	1	5	8	1	...		15
7	Poona do.	...	...	...	...	...	...	...	...	...	...	2	1	1	5	8	1	...		17
8	Sholápur do.	...	...	...	...	...	...	...	...	...	...	3	...	1	4	6	1	1		15
9	Sátára do.	...	...	...	...	...	...	...	...	...	...	1	...	1	5	12	2	7		26
10	Ratnágiri do.	...	...	...	...	...	...	...	...	...	...	1	...	1	6	8	1	3		13
	Total ...	1	...	1	1	4	...	...	...	2	...	8	1	5	25	42	6	11		101
	THE SOUTHERN REGISTRATION DISTRICT.																			
	Administrative Charges	1	...	1	1	2	...	...	...	2	...	...	...	...	...	...	...	...		8
11	Belgaum Collectorate	...	...	...	...	...	...	...	...	...	...	2	...	1	3	11	1	...		16
12	Dhárwár do.	...	...	...	...	...	...	...	...	...	...	3	...	1	5	11	1	1		21
13	Bijápur do.	...	...	...	...	...	...	...	...	...	...	2	...	1	3	7	1	...		12
14	Kánara do.	...	...	...	...	...	...	...	...	...	...	1	...	1	3	9	1	...		13
15	Kolhápur States	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	2	13		11
16	Southern Marátha Jághirs... ...	...	...	...	...	2	...	...	...	...	...	...	...	...	...	...	...	15		17
	Total ...	1	...	1	1	4	...	...	1	2	...	8	...	4	14	38	6	29		98
	THE EASTERN GUJARAT REGISTRATION DISTRICT.																			
	Administrative Charges	1	...	1	1	3	...	...	...	2	...	...	...	...	...	...	...	...		9
17	Surat Collectorate	...	...	...	...	...	...	...	...	...	...	2	...	1	3	5	1	3		14
18	Broach do.	...	...	...	...	...	...	...	...	...	...	1	...	1	1	3	1	...		6
19	Kaira do.	...	...	...	...	...	...	...	...	...	...	1	...	1	3	6	1	1		13
20	Panch Mahále	...	...	...	...	...	...	...	...	...	...	...	...	1	2	3	1	...		6
21	Ahmedabad Collectorate	...	...	...	...	...	...	...	...	...	...	3	...	1	3	8	1	...		15
22	Mahi Kántha Agency	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8		8
23	Rewa Kántha do.	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	13		12
	Total ...	1	...	1	1	3	...	...	...	2	...	7	...	5	12	25	5	25		83
	THE WESTERN GUJARAT CIRCLE.																			
	Administrative Charges	...	1	...	...	...	...	1	1	2	...	...	...	...	...	...	...	...		6
24	Káthiáwár	...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	4	35		36
25	Pálanpur	...	...	...	...	...	...	...	1	...	1	...	...	...	...	...	1	8		10
	Total ...	...	1	...	...	...	...	1	2	2	2	...	...	...	...	...	5	43		52
	THE SIND REGISTRATION DISTRICT.																			
	Administrative Charges	1	1	1	1	4	...	...	...	2	...	...	...	...	...	...	...	...		10
26	Karáchi Collectorate	...	...	...	...	...	...	...	...	...	...	2	...	1	4	5	1	...		10
27	Hyderabad do.	...	...	...	...	...	...	...	...	...	...	1	...	2	5	6	1	...		14
28	Thar and Párkar	...	...	...	...	...	...	...	...	...	...	...	...	1	2	4	1	...		7
29	Shikárpur Collectorate	...	...	...	...	...	...	...	...	...	...	5	...	1	6	9	1	3		23
30	Upper Sind Frontier	...	...	...	...	...	...	...	...	...	...	...	...	1	1	2	1	...		4
	Total ...	1	1	1	1	4	...	...	...	2	...	8	...	6	18	26	5	3		68
	THE BARODA CIRCLE.																			
31	Baroda States...	...	...	1	1	1	...	...	...	...	...	...	...	...	...	...	...	31		34
	THE CUTCH CIRCLE.																			
32	Cutch States	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	17		19
	IN THE ADEN MUNICIPALITY.																			
33	Aden	...	...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	...		1
34	KHELAT	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...
35	QUETTA...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...		...
	TOTAL FOR THE BOMBAY PRESIDENCY.	5	3	6	6	20	2	1	3	29	2	48	2	24	89	167	29	163		534

DEPARTMENT.

in the Bombay Presidency during the year 1887-88.

Expenditure.				Paid from.								
Pay of Establishment.	Travelling Allowances.	Contingencies.	Total Cost.	Provincial Funds.	Local Funds.	Municipal Fund.	Cantonment Funds.	Native State Funds.	Total.	Number of all successful Vaccinations and Re-vaccinations.	Average Cost of each successful Case.
21	22	23	24	25	26	27	28	29	30	31	32
Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.		Rs. a. p.
10,577 8 1	935 8 8	525 9 0	12,038 9 9	12,038 9 9	.....	.....	.....	.....	12,038 9 9	.....	.....
7,201 9 3	...	545 15 2	7,747 8 5	..	7,357 4 5	224 0 0	.....	66 4 0	7,747 8 5	37,333	0 3 4
3,639 7 6	14 0 0	223 3 11	3,876 11 5	..	3,531 7 11	225 3 6	.....	.....	3,876 11 5	18,897	0 3 3
4,192 1 2	...	334 7 8	4,526 8 10	...	3,676 2 10	490 6 0	.....	360 0 0	4,526 8 10	20,769	0 3 6
3,605 13 11	6 0 4	258 14 11	3,870 13 2	..	3,190 2 10	174 3 0	.....	506 7 4	3,870 13 2	18,067	0 3 4
29,216 7 11	955 9 0	1,883 2 8	32,060 3 7	12,038 9 9	17,775 2 0	1,313 12 6	.....	932 11 4	32,060 3 7	95,066	0 5 4
4,145 9 0	382 6 0	16 0 0	4,543 6 0	4,543 6 0	.....	.....	.....	.....	4,543 6 0	.....	.....
9,175 0 11	...	8,397 3 9	17,572 4 5	...	.....	17,572 4 5	.....	.....	17,572 4 5	19,404	0 14 6
13,320 0 11	382 6 0	8,413 3 6	22,115 10 5	4,543 6 0	.....	17,572 4 5	.....	.....	22,115 10 5	19,404	1 2 3
17,890 14 3	2,250 2 4	511 11 9	20,652 12 4	20,502 14 4	.....	.....	.....	120 0 0	20,622 12 4	.....	.....
4,189 10 0	...	146 11 0	4,327 5 6	...	4,032 14 6	294 7 0	.....	.....	4,327 5 6	32,457	0 2 2
5,183 8 2	...	585 3 3	5,768 11 5	...	4,123 4 0	1,017 4 8	628 2 3	.....	5,768 11 5	29,170	0 3 2
4,256 6 7	...	176 11 6	4,433 2 1	.	3,161 3 4	958 14 3	.....	312 11 6	4,433 2 1	27,561	0 2 7
6,650 10 1	...	488 6 3	7,139 0 4	...	5,514 15 10	314 5 0	.....	1,308 9 6	7,139 0 4	50,497	0 2 3
5,028 10 4	...	261 8 5	5,290 2 9	...	4,492 15 10	93 12 0	.....	703 6 11	5,290 2 9	38,660	0 2 2
43,160 11 11	2,250 2 4	2,170 4 2	47,581 2 5	20,502 14 4	21,042 11 0	2,678 5 11	628 2 3	2,729 2 11	47,581 2 5	178,945	0 4 3
7,964 1 0	2,017 12 10	579 6 7½	10,561 4 5½	10,561 4 5½	.....	.....	.....	.....	10,561 4 5½	.....	.....
4,521 4 3	...	385 2 3	4,906 6 6	.....	4,431 9 6	484 13 0	.....	.....	4,906 6 6	27,273	0 2 11
5,848 12 5	...	754 8 9	6,603 5 2	.....	5,516 11 11	782 9 3	.....	274 0 0	6,603 5 2	30,908	0 3 5
3,365 7 4	...	290 7 9	3,655 15 1	.....	3,517 15 1	108 0 0	.....	.....	3,655 15 1	25,495	0 2 4
3,501 5 6	...	291 6 1	3,792 11 10	.....	3,736 9 3	116 2 7	.....	.....	3,852 11 10	11,891	0 5 2
4,287 3 8	...	228 13 4	4,516 1 0	.....	.....	.....	.....	4,516 1 0	4,516 1 0	26,954	0 2 8
4,659 8 4	125 13 0	163 10 10	4,959 0 2	.....	.....	.....	.....	4,959 0 2	4,959 0 2	18,027	0 4 11
34,247 10 9	2,143 9 10	2,063 7 7½	39,054 12 2½	10,561 4 5½	17,252 13 9	1,491 8 10	.....	9,749 1 2	39,054 12 2½	138,548	0 4 6
15,583 14 3	2,127 1 0	810 14 2	18,501 13 5	18,501 13 5	.....	.....	.....	.....	18,501 13 5	.....	.....
3,962 3 10	...	380 15 7	4,343 3 5	.....	2,833 7 8	701 7 0	.....	808 4 9	4,343 3 5	27,422	0 2 6
1,710 6 3	...	180 12 1	1,891 4 4	.....	1,621 0 10	270 3 6	.....	.....	1,891 4 4	10,587	0 2 10
3,399 11 5	...	344 13 9	3,744 9 2	.....	3,154 4 8	389 3 6	.....	231 1 0	3,744 9 2	26,585	0 2 3
1,756 14 9	7 4 0	165 2 5	1,929 5 2	.....	1,929 5 2	.....	.....	.....	1,929 5 2	8,673	0 3 7
4,150 2 8	...	383 5 8	4,533 8 1	.....	3,667 10 3	865 13 10	.....	.....	4,533 8 1	30,471	0 2 5
2,580 11 4	...	144 0 6	2,724 11 10	.....	.....	.....	.....	2,724 11 10	2,724 11 10	14,412	0 2 11
3,285 3 6	...	224 12 4	3,509 15 10	.....	.....	.....	.....	3,509 15 10	3,509 15 10	17,954	0 3 2
36,409 5 9	2,134 5 0	2,034 12 6	41,178 7 3	18,501 13 5	13,205 12 7	2,176 11 10	.....	7,294 1 5	41,178 7 3	136,504	0 4 10
6,659 12 8	1,941 0 6	520 7 8	8,501 4 10	7,501 4 10	.....	.....	.....	600 0 0	8,501 4 10	.....	.....
11,802 13 4	2,123 1 0	1,074 3 2	15,000 1 7	323 0 0	.....	.....	.....	14,748 1 7	15,000 1 7	81,386	0 2 11
3,268 11 10	...	242 3 7	3,511 15 5	94 8 0	.....	.....	94 8 0	3,322 15 5	3,511 15 5	23,126	0 2 5
21,131 5 10	4,064 1 6	1,837 14 6	27,013 5 10	8,247 12 10	.....	.....	94 8 0	18,671 1 0	27,013 5 10	104,512	0 4 2
17,384 8 0	2,889 8 1	677 12 10	20,951 12 11	19,474 6 2	.....	1,477 6 9	.....	.....	20,951 12 11	.....	.....
3,835 7 10	744 8 0	195 2 3	4,275 2 1	.....	3,677 1 1	598 1 0	.....	.....	4,275 2 1	16,008	0 4 3
4,172 3 1	772 15 6	256 5 0	5,201 7 7	.....	4,896 6 5	305 1 2	.....	.....	5,201 7 7	23,155	0 3 7
2,023 12 8	443 12 3	142 6 6	2,621 15 5	.....	2,621 15 5	.....	.....	.....	2,621 15 5	10,792	0 3 11
6,928 12 3	982 12 3	404 5 6	8,315 13 11	.....	5,793 4 6	1,521 9 11	.....	1,242 15 6	8,315 13 11	35,497	0 3 9
1,164 15 6	279 15 6	84 10 7	1,529 9 7	.....	1,529 9 7	.....	.....	.....	1,529 9 7	6,594	0 3 9
35,081 11 4	6,113 7 7	1,760 10 7	42,905 13 6	19,474 6 2	18,446 5 0	3,732 2 10	.....	1,242 15 6	42,905 13 6	92,136	0 7 5
11,692 1 11	226 13 8	166 11 7	12,085 11 2	.....	.....	.....	.....	12,085 11 2	12,085 11 2	69,997	0 2 9
3,841 11 3½	3,668 9 6½	13 0 8½	7,523 5 6½	.....	.....	.....	.....	7,523 5 6½	7,523 5 6½	22,586	0 5 4
636 13 8	...	31 3 7	568 1 3	.....	.....	568 1 3	.....	.....	568 1 3	955	0 6 0
...	.....	.....	.....	.....	.....	.....	.....	.....	.....	41	.....
...	...	.....	.....	.....	.....	.....	.....	.....	.....	861	.....
2,28,578 1 5½	21,030 0 6½	21,559 7 5	2,72,076 9 2	98,870 0 11½	87,722 12 4	29,532 15 7	722 10 3	60,228 2 ½	2,72,076 9 2	869,255	0 5 1

B.—DISPENSARY VACCINATION.

Statement No. III, showing Dispensary Vaccination in the Bombay Presidency during the year 1887-88.

Districts.		Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination.				Re-vaccination.		Percentages of Successful Cases.	
								Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.
									Under 1 year.	1 and under 6.	Total of all Ages.				
1		2	3	4			5	6	7	8	9	10	11	12	13
	THE WESTERN REGISTRATION DISTRICT.			Males.	Females.	Total.									
Khándesh Collectorate.	Dharangaon ...	...	...	P. 27 R. 7	25 ...	52 7	59	52	45	7	52	7	7	100·	100·
	Párola ...	...	...	19	18	37	37	37	33	4	37	...	...	100·	...
	Nandurbár ...	...	...	P 29 R. 15	22 17	51 32	83	51	17	23	40	32	20	78·43	62·50
	Chopda ...	...	...	P. 1 R. ...	3 3	4 3	7	4	3	1	4	3	3	100·	100·
	Total ...	...	...	P. 76 R. 22	68 20	144 42	46	144	98	35	133	42	30	92·36	71·43
Násik Collectorate.	Dindori ...	...	...	28	20	48	48	48	43	4	47	...	...	97·92	...
	Yeola ...	...	...	3	2	5	5	5	1	2	3	...	...	60·00	...
	Total ...	...	...	31	22	53	26	53	44	6	50	...	..	94·34	...
Thána Collectorate.	Bhiwndi ...	...	...	14	13	27	27	27	10	16	27	...	...	100·	...
	Kurla ...	...	...	P. 108 R. 44	76 10	184 54	238	184	96	83	179	54	21	97·29	38·89
	Mátherán ...	...	...	3	4	7	7	7	...	7	7	...	...	100·	...
	Total ...	...	...	P. 125 R. 44	93 10	218 54	91	218	106	106	213	54	21	97·70	38·89
	TOTAL FOR THE WESTERN REGISTRATION DISTRICT.	...	...	P 232 R. 66	183 30	415 96	57	415	248	147	396	96	51	95·42	53·12
	THE PRESIDENCY CIRCLE.														
Bombay City.	Her Majesty's Common Jail ...	...	...	P. 1 R. 58	... 5	1 63	64	1	1	...	1	66	34	100·	53·97
	Her Majesty's House of Correction.	...	...	R. 92	...	92	92	...	...	...	...	92	19	...	20·65
	TOTAL FOR THE PRESIDENCY CIRCLE ...	...	...	P. 1 R. 150	.. 5	1 155	78	1	1	...	1	158	53	100·	34·19
	THE CENTRAL REGISTRATION DISTRICT.														
Ahmednagar Collectorate.	Nevása ...	...	...	1	7	8	8	8	6	...	6	...	...	75·00	...
Sátára Collectorate.	Wái ...	...	...	27	36	63	63	63	40	20	62	...	...	98·41	...
Native States.	Sávantvádi ...	...	...	P. 233 R. 69	192 15	425 84	170	427	274	138	416	84	33	97·88	39·29
	TOTAL FOR THE CENTRAL REGISTRATION DISTRICT ...	...	...	P. 261 R. 69	235 15	496 84	116	498	320	158	484	84	33	97·58	39·29
	THE SOUTHERN REGISTRATION DISTRICT.														
Bijápur Collectorate.	Bágevádi ...	...	...	10	9	19	19	19	17	2	19	...	...	100·	...
Southern Marátha Jaghírs.	Sángli ...	..	...	P. 110 R. ...	83 1	193 1	194	193	106	54	160	1	1	82·90	100·
	Sháhápur ..	...	...	179	163	342	342	342	120	173	302	...	...	88·30	...
	Mangalvedha ...	...	...	P. 206 R. 6	215 ...	421 6	427	421	334	57	395	6	3	93·82	50·00
	Terdál ...	...	...	75	51	126	126	127	42	42	86	...	...	68·25	..
	Shirhatti ...	...	...	P. 95 R. 4	67 ...	162 4	166	167	113	27	142	4	2	87·65	50·00
	Kuchi ...	...	...	37	29	66	66	66	56	7	63	...	...	95·45	...
	Miraj...	...	...	12	13	25	25	27	16	8	24	...	...	96·00	...
	Mudhol ...	...	...	P. 95 R. 10	120 ...	215 10	225	215	115	94	213	10	7	99·07	70·00
	Total ...	...	...	P. 809 R. 20	741 1	1,550 21	196	1,558	902	462	1,385	21	13	89 35	61·90
	TOTAL FOR THE SOUTHERN REGISTRATION DISTRICT.	...	...	P. 819 R. 20	750 1	1,569 21	177	1,577	919	464	1,404	21	13	89 48	61·90

Statement No. III., showing Dispensary Vaccination, &c.—*continued.*

Districts.		Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the Season.	Total Number of Persons vaccinated.			Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination.				Re-vaccination.		Percentages of Successful Cases.	
								Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.
									Under 1 year.	1 and under 6.	Total of all Ages.				
1		2	3	4			5	6	7	8	9	10	11	12	13
	THE EASTERN GUJARÁT REGISTRATION DISTRICT.			Males.	Females.	Total.									
Surat Collectorate.	Bulsár	...	...	P. 157 R. 4	141 2	298 6	304	299	164	120	285	6	6	95·64	100·
Kaira Collectorate.	Kapadvanj	...	...	234	212	446	446	446	252	163	417	...	...	93·50	...
	Kaira Jail	...	...	42	2	44	44	44	...	...	44	...	...	100·	...
	Total ...	...	...	276	214	490	245	490	252	163	461	...	..	94·08	...
Ahmedabad Collectorate.	Dholera	...	...	85	69	154	154	154	50	97	147	...	...	95·45	...
	Khárághoda ...	...	...	44	38	82	82	89	66	9	75	...	...	91·46	...
	Total ...	...	...	129	107	236	118	243	116	106	222	...	...	94·07	...
Mahi Kántha States.	Sádra	...	...	56	48	104	104	104	54	17	74	...	...	71·15	...
	TOTAL FOR THE EASTERN GUJARÁT REGISTRATION DISTRICT.	...	...	P. 618 R. 4	510 2	1,128 6	189	1,136	586	406	1,042	6	6	92·38	100·
	THE WESTERN GUJARÁT CIRCLE.														
Káthiáwár.	Wadhwán ...	...	...	P. 41 R. 2	42 1	83 3	86	83	57	10	67	3	...	80·72	...
Native States.	Gondal	...	...	31	37	68	68	68	55	12	67	...	...	98·53	...
	Upleta	...	...	P. 131 R. 2	126 ...	257 2	259	257	185	38	224	2	...	87·16	...
	Dhoráji	...	...	P. 148 R. 4	157 ...	305 4	309	305	239	66	305	4	4	100·	100·
	Bháyávadar... ...	...	...	P. 125 R. 3	102 6	227 9	236	227	210	17	227	9	7	100·	77·78
	Sársai	...	...	32	19	51	51	51	45	6	51	...	...	100·	...
	Total ...	...	...	P. 467 R. 9	441 6	908 15	185	908	734	139	874	15	11	96·26	73·33
	TOTAL FOR THE WESTERN GUJARÁT CIRCLE.	...	...	P. 508 R. 11	483 7	991 18	168	991	791	149	941	18	11	94·95	61·11
	THE SIND REGISTRATION DISTRICT.														
Karáchi Collectorate.	Karáchi Jail ...	...	...	P. 6 R. 284	... 4	6 288	294	6	...	...	5	288	14	83·33	4·86
	Keti Bandar ...	...	...	20	20	40	40	40	29	11	40	...	...	100·	...
	Tatta...	...	...	P. 92 R. 1	65 ...	157 1	158	157	47	49	106	1	1	67·52	100·
	Jerruck	...	...	11	8	19	19	19	13	1	14	...	...	73·68	...
	Sehwan	...	...	3	3	6	6	6	1	2	3	...	...	50·00	...
	Tháno Bula Khán ...	...	...	3	1	4	4	4	...	2	2	...	...	50·00	...
	Total ...	...	..	P. 135 R. 285	97 4	232 289	87	232	90	65	170	289	15	73·28	5·19
Hyderabad Collectorate.	Tháru Sháh... ...	...	...	P. 28 R. 2	29 ...	57 2	59	57	29	8	37	2	1	64·91	50·00
	Hála	...	...	P. 33 R. 16	24 ...	57 16	73	57	55	...	55	16	5	96·49	31·25
	Tando	...	...	9	6	15	15	15	5	3	8	...	...	53·33	...
	Tando Adam ...	...	...	3	2	5	5	5	...	...	...	...	...	...	...
	Tando Bágo ...	...	...	5	5	10	10	10	1	9	10	...	...	100·	...
	Mirpur Khás ...	...	...	P. 18 R. 28	9 ...	27 28	55	27	22	5	27	28	16	100·	57·14
	Total ...	...	...	P. 96 R. 46	75 ...	171 46	36	171	112	25	137	46	22	80·12	47·83

Statement No. III, showing Dispensary Vaccination, &c.—*continued.*

Districts.		Number of Dispensaries in each District to which a Vaccinator is attached.	Average Number of Vaccinators attached to Dispensaries during the Season.	Total Number of Persons vaccinated.				Average Number of Persons vaccinated by each Vaccinator.	Primary Vaccination.				Re-vaccination.		Percentages of successful Cases.	
									Total.	Successful.			Total.	Successful.	Primary.	Re-vaccination.
										Under 1 year.	1 and under 6.	Total of all ages.				
1		2	3	4				5	6	7	8	9	10	11	12	13
	THE SIND REGISTRATION DISTRICT—*continued.*			Males.	Female's.	Total.										
Shikárpur Collectorate.	Mehar	..	...	21	14	35		35	35	26	7	33	...	...	94·29	...
	Kambar	...	..	P. 126 R. 2	110 14	236 16		252	236	161	60	229	16	10	97·03	62·50
	Tolal ...	...	...	P. 147 R. 2	124 14	271 16		143	271	187	67	262	16	10	96·68	62·50
Upper Sind Frontier.	Jacobabad	...	...	91	60	151		151	151	71	14	91	...	...	60·26	...
	TOTAL FOR THE SIND REGISTRATION DISTRICT	...	...	P. 469 R. 333	356 18	825 351		78	825	430	171	660	351	47	80·00	13·39
	THE BARODA CIRCLE.															
Native States.	Dhari Branch Dispensary...	...	...	1	5	6		6	6	5	1	6	...	...	100·	...
	Sávli	...	...	40	33	73		73	73	55	18	73	...	...	100·	...
	Padra...	...	...	24	20	44		44	44	39	5	44	...	...	100·	...
	Pátan...	..	...	104	80	184		184	184	129	54	184	...	...	100·	...
	Dehegam	...	..	43	40	83		83	83	65	15	80	...	...	96·39	...
	Vadnagar	...	...	70	47	117		117	117	103	13	117	..	...	100·	...
	Vijápur	...	...	50	37	87		87	87	56	30	87	...	...	100·	...
	Gandevi	...	...	P. 111 R. 2	81 ...	192 2		194	192	122	55	177	2	2	92·18	100·
	Bet	...	..	18	14	32		32	32	8	24	32	...	...	100·	...
	Amreli Hospital ...	...	...	66	65	131		131	131	59	69	131	...	...	100·	...
	Dámnagar	...	...	35	32	67		67	67	46	20	67	...	...	100·	...
	Dhari Battalion Hospital	...	..	14	13	27		27	27	21	5	27	...	...	100·	...
	Vyara	..	...	13	7	20		20	20	9	11	20	...	...	100·	...
	Kadi Civil Hospital...	...	...	20	22	42		42	42	26	4	30	...	...	71·43	...
	Kálol	...	...	69	57	126		126	126	99	23	126	...	...	100·	...
	Sidhpur	...	...	118	85	203		203	203	174	29	203	...	...	100·	...
	Kodinar	...	...	27	28	55		55	55	51	2	54	...	...	98·18	...
	TOTAL FOR THE BARODA CIRCLE ...	...	...	P. 823 R. 2	666 ...	1,489 2		88	1,489	1,067	378	1,458	2	2	97·92	100·
ADEN	SHAIK OTHMAN ...	...	...	381	269	650		650	650	58	280	598	...	...	92·00	...
	STEAMER POINT ...	...	...	P. 354 R. 1	45 ...	399 1		400	399	19	107	399	1	1	100·	100·
	TOTAL ..	..	...	P. 735 R. 1	314 ...	1,049 1		525	1,049	77	387	997	1	1	95·04	100·
BUSHIRE		...	...	111	133	244		244	244	66	121	210	...	...	86·07	...
MUSKAT		...	...	170	124	294		294	294	48	134	286	...	...	97·28	...
TOTAL FOR THE	BRITISH TERRITORY	...	...	P. 2,318 R. 554	1,624 55	3,942 609		120	3,950	1,495	1,371	3,605	612	158	91·45	25·94
	NATIVE STATES ...	..	...	P. 2,429 R. 102	2,130 23	4,559 125		134	4,569	3,088	1,144	4,274	125	59	93·75	47·20
GRAND TOTAL FOR THE BOMBAY PRESIDENCY ...		...	...	P. 4,747 R. 656	3,754 78	8,501 734		127	8,519	4,583	2,515	7,879	737	217	92·68	29·57

Comparative Statement No. IV, showing the Number of Persons Primarily Vaccinated and the Number of those Persons who were Successfully Vaccinated in each of the undermentioned official years.

Establishment.	Persons primarily vaccinated.																			
	Years ending 31st March.																			
	1879.		1880.		1881.		1882.		1883.		1884.		1885.		1886.		1887.		1888.	
	Total Number.	Number successfully vaccinated.	Total Number.	Nubmer successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.	Total Number.	Number successfully vaccinated.
Government	4,630	4,444	3,374	3,220	4,130	3,980	5,563	5,497	5,266	5,225	6,400	6,165	4,397	4,249	4,947	4,545	4,461	4,183	3,894	3,653
Municipal	42,211	39,129	48,318	45,069	49,857	47,361	54,726	52,225	65,208	61,802	59,559	56,670	56,895	54,582	58,083	55,631	57,523	55,484	62,774	60,208
Local Fund	304,420	292,640	322,871	312,124	347,194	337,392	379,008	369,913	419,822	407,635	441,180	426,408	441,340	425,148	471,789	454,756	470,964	451,857	487,441	466,469
Cantonment	872	846	839	939	967	967	1,060	1,060	1,471	1,450	1,465	1,449	1,485	1,472	1,518	1,442	1,474	1,402	1,906	1,856
Native States	188,447	174,757	188,196	175,979	213,411	202,210	257,752	246,565	266,280	254,072	284,180	269,598	270,194	253,942	294,426	279,746	300,564	285,003	311,721	296,157
Dispensary	17,887	16,233	19,119	17,406	22,732	21,009	26,813	25,050	28,770	26,733	29,986	27,439	24,014	21,626	20,298	18,926	17,699	16,505	8,501	7,879
Army... European	494	453	635	604	659	610	571	434	402	390	497	466	328	305	206	188	317	280	401	359
Army... Native	3,008	2,719	3,049	2,499	3,555	2,984	3.830	3,179	4,987	4,438	3,698	3,128	3,554	3,121	3,120	2,901	2,970	2,672	3,117	2,682
Total ...	561,969	531,221	586,501	557,840	642,505	616,513	729,323	703,923	792,206	761,745	826,965	791,323	802,207	764,445	854,387	818,135	855,972	817,386	879,755	839,263

Note.—Re-vaccinations are wholly excluded from this Statement.

Annual Reports: Annual Report of the Sanitary Commissioner for the Government of Bombay for 1887.

No. 3393 OF 1888.

GENERAL DEPARTMENT.

Bombay Castle, 28th September 1888.

Letter from the Sanitary Commissioner for the Government of Bombay, No. B.-1869, dated 30th June 1888—Submitting Mr. Hewlett's Annual Report of the Sanitary Department for 1887.

Letter from the Sanitary Commissioner for the Government of Bombay, No. 2374—B., dated 9th August 1888.

Letter from the Under Secretary to the Government of India, Home Department (Sanitary), No. 231, dated 4th August 1888.

Telegram from the Government of India, Home Department, dated 5th September 1888.

RESOLUTION.—Once more the Governor in Council has to express satisfaction with the steady increase reported in registration of births, of which 628,193 or more by 46,640 than in the previous year were recorded in the year under review. The improvement extended, as shown in the margin, to all registration districts except Gujarát, and was specially striking in the southern district, the results reported from which are decidedly good. The urban was, as usual, smaller than the rural birth-rate in almost all districts, those rates for the whole presidency being respectively 27·94 and 39·69 per mille of population; and though in the few towns singled out by Mr. Hewlett for favourable mention in his 14th paragraph due attention was paid to the registration of births, the rates recorded in towns generally continued to be very untrustworthy, and in several cases, amongst which those of Thána and Kalyán are again the most conspicuous, are justly termed "absolutely valueless." The Governor in Council is not prepared to adopt Mr. Hewlett's suggestion that the establishment necessary to obtain proper registration should be quartered on the backward Municipalities at their expense, but the Collectors of the districts in which are situated the towns mentioned in paragraph 13 of this report as having registered a death-rate of less than 30 per mille of population should be asked to report, through the Commissioner of the Division, what special measures they can suggest for improving the present unsatisfactory state of things. Government regret to notice that practically no improvement is reported in the registration of births in Bombay City.

Districts.	Population according to Census of 1881.	1886.		1887.	
		No. of Births.	Ratio per 1,000 of population.	No. of Births.	Ratio per 1,000 of population.
Western Registration District	4,081,830	124,845	30·59	138,372	33·90
Central do.	4,293,776	159,417	37·13	178,503	41·57
Southern do.	2,897,254	116,253	41·41	127,735	45·50
Eastern Gujarát do.	2,857,731	110,057	38·72	109,917	38·46
Sind Registration do.	2,413,823	70,381	29·16	73,666	30·51
Presidency ..	16,454,414	581,553	35·34	628,193	38·16

2. The number of registered deaths considerably exceeded that of the previous year, being 455,261 as compared with 381,185 or 27·67 per mille as compared with 23·17, and there is no apparent reason for doubting the correctness of Mr. Hewlett's inference that 1887 was a more unhealthy year than 1886. As shown in the margin the increase extended to all registration districts except Sind, for which the registered rates were too low in all Collectorates to justify their being considered as in any respect trustworthy. In the general rural death-rate there was a considerable increase. The Sanitary Commissioner's estimate of the general urban death-rate as 18·33 per mille is evidently incorrect.

Districts.	Population according to Census of 1881.	1886.		1887.	
		No. of deaths.	Ratio per 1,000 of population.	No. of deaths.	Ratio per 1,000 of population.
Western Registration District	4,081,830	99,165	24·29	121,585	29·78
Central do.	4,293,776	97,078	22·61	127,983	29·81
Southern do.	2,897,254	68,812	24·01	77,507	27·64
Eastern Gujarát do.	2,857,731	73,657	25·77	89,054	31·16
Sind do.	2,413,823	42,473	17·60	39,327	16·71
Presidency ..	16,454,414	381,185	23·17	455,261	27·67

3. The causes of deaths are contrasted with those of the previous year in the marginal statement, which shows that the most striking feature in the history of the year under review was the increase of both cholera and small-pox, which diseases were almost entirely absent in 1886. The former, though widely distributed, was not severe except in the Deccan, from some of the Collectorates whereof, especially Sátára and Sholápur, a very high death-rate is reported. In Bombay City the deaths registered from cholera (262) were far more numerous than in the previous year when only 17 were reported, but considerably fewer than in any of the three previous years. In his general remarks on cholera the Sanitary Commissioner has somewhat unnecessarily re-opened the question of the supply of cholera medicine, regarding which, if he believed himself able to adduce any new facts or arguments, he should have submitted a separate report. Small-pox was prevalent chiefly in Khándesh, where 2,678 deaths out of the total of 3,753 took place.

Causes of Deaths.	1886.	1887.
	Number.	Number.
Cholera	167	25,711
Small-pox ...	876	3,753
Fevers	281,450	308,722
Bowel-complaints.	36,612	42,634
Injuries	5,692	5,558
Other causes ...	56,388	68,883
All causes ...	381,185	4,55,261

4. The Sanitary Commissioner reports an increase in both primary vaccinations and revaccinations, which were respectively 879,755 and 49,790 as compared with 855,972 and 47,938 in the previous year; but the inspection of the work of vaccinators was unfortunately less complete than in the previous year owing to the transfer of two Deputy Sanitary Commissioners to Burma.

5. As regards Section VIII (Sanitary Works—Military) the Sanitary Commissioner should be asked to explain what works exactly are referred to in the table appended to paragraph 134. It would seem in the case of Bombay, at all events, that the figures in that table relate for the most part either to military works which were not sanitary or to sanitary works which were not military; and if so some explanation should have been given of their insertion. Both this section and the following one (IX, Sanitary Works—Civil) contain as usual a quantity of detailed information useful mainly for purposes of reference; but it seems to the Governor in Council that such information might with advantage be classified methodically and given in an appendix, the body of the report being reserved for any remarks of a critical or explanatory nature that may seem necessary, together with a brief account of any scheme or schemes which may be said to form a salient feature in the sanitary history of the year.

6. The information supplied by the Sanitary Commissioner from the report of the Health Officer of the Port of Bombay is generally satisfactory. Government cannot admit that the sanitary condition of the foreshore, in view of the general health of the population of Bombay City, is as defective as Mr. Hewlett's remarks would imply, and the last sentence of Section 171 is wholly unjustifiable. That the late Sanitary Commissioner's zeal induced him to take an equally gloomy view of various other matters is shown in the later paragraphs of the present report. As regards Mr. Hewlett's remarks on the new Bill of Health, the Sanitary Commissioner should be informed that such criticism is evidently out of place in an administration report.

7. His Excellency the Governor in Council thinks it much to be regretted that Mr. Hewlett, whose enthusiasm in the cause of sanitation is well known, should have introduced personal and controversial matter in an official document disregarding the distinct instructions given by Government in their Resolution reviewing his previous Administration Report that such matter should be avoided. With the exception of the few paragraphs commenting on the report of the Health Officer of the Port of Bombay almost the whole of the last section —171 paragraphs in length—of Mr. Hewlett's report is either entirely irrelevant or is improper in tone. Of the first kind is the account of Mr. Hewlett's visits to a Deccan village and a Gujarát town, which would be an interesting contribution to a Sanitary Magazine, and of the second are Mr. Hewlett's remarks on the Public Works Department. Government regret that Mr. Hewlett should have made an opportunity for what they are confident is an unjustifiable attack on the officers of the Public Works Department as a body. The accusation in the latter

part of paragraph 173 is, it is believed, absolutely unfounded, and further, in the most recent instance of sanitary defects in designs, the sanitary authorities (Colonel Ducat and Mr. Hewlett) are themselves to a great extent responsible. The instance referred to is that dealt with in paragraphs 176—179 of the report. The nuisance, so far as it is attributable to the unventilated condition of the municipal sewer, was mainly caused by those officers having in consultation drawn up, approved and recommended a project for house connections without first ascertaining that the sewer itself was properly ventilated, and they are also responsible for defects in detail, such as those referred to in paragraphs 177 and 178. Mr. Hewlett was reminded in the Resolution on his Annual Report for 1886 that Government were acquainted with his views on Village Sanitary Legislation and prepared to legislate on practical lines. He should therefore have abstained from reiterating opinions with which Government were familiar on a subject which is of an intricate administrative nature and which has for some time engaged the earnest attention of Government.

J. DEC. ATKINS,
Under Secretary to Government.

To

The Sanitary Commissioner for the Government of Bombay,
The Surgeon General with the Government of Bombay,
The Military Department of the Secretariat,
The Judicial Department of the Secretariat,
The Public Works Department of the Secretariat,
The Commissioner, N. D.,
The Commissioner, C. D.,
The Commissioner, S. D.,
The Commissioner in Sind,
All Collectors, including the Collectors and Deputy Commissioners in Sind,
The Municipal Commissioner for the City of Bombay,
The Compiler, General Administration Report, for 1887-88,
The Accountant General,
The Director of Land Records and Agriculture,
} With copies of the report.

The Government of India,
The Secretary of State for India,
} By letter.

The Editors' Table, Bombay,
The Editors' Table, Poona, care of the City Magistrate, Poona,
The Editor "Dhárwár Vritt" Dhárwár (for his own use and for the use of other Editors of Newspapers in Dhárwár).

No. OF 1888.

Copy forwarded for information and guidance to

00133387

Digitized with financial assistance from
Government of Maharashtra
on 13 March, 2020